Undergraduate Catalog of Studies, 2012-2013

University of Arkansas, Fayetteville
For More Information
http://catalogofstudies.uark.edu/
Area Code: 479

Admissions
Undergraduate Admissions, 232 Silas H. Hunt Hall ...............575-5346
School of Law Admissions, 110 Waterman Hall..................575-3102
Graduate School Admissions, 346 N. Arkansas Ave..............575-6246
(Stone House North)
International Admissions, 346 N. Arkansas Ave..................575-6246
(Stone House North)

Campus Tours & Visits
Office of Admissions, 232 Silas H. Hunt Hall ......................575-5346
Graduate School Admissions, 346 N. Arkansas Ave..............575-6246

Correspondence Courses
Independent Study
Center for Continuing Education .....................................575-3647
Toll-free ........................................................................1-800-638-1217

Deans’ Offices
Honors College .................................................................575-7678
418 Administration Building
Dale Bumpers College of Agricultural, Food and Life Sciences
E-108 Agricultural, Food and Life Sciences Bldg...............575-2252
Fay Jones School of Architecture
112 W. Center St., Suite 700 .............................................575-4945
J. William Fulbright College of Arts & Sciences
525 Old Main ................................................................575-4801
Sam M. Walton College of Business
301 Business Building .....................................................575-5949
College of Education and Health Professions
324 Graduate Education Bldg .............................................575-3208
College of Engineering
4183 Bell Engineering Center .............................................575-3051
Graduate School and International Education
346 N. Arkansas Avenue (Stone House North) ..................575-4401
School of Law
110 Waterman Hall ........................................................575-5601

Enrollment Services
Vice Provost of Enrollment and Dean of Admissions
232 Silas H. Hunt Hall .....................................................575-3771

Fee Payments
Student Accounts
Arkansas Union Room 213 ................................................575-5651

Financial Aid and Scholarships
Office of Financial Aid
114 Silas H. Hunt Hall .....................................................575-3806
Academic Scholarship Office
101 Old Main ..................................................................575-4464

Greek Life
Arkansas Union A687 .........................................................575-5001

Honors Programs
Honors College .................................................................575-7678
ADMN 418
Dale Bumpers College of Agricultural, Food and Life Sciences
Dean’s Office AFLS E-108 ...............................................575-2252
Fay Jones School of Architecture
112 W. Center St., Suite 700 .............................................575-4945
J. William Fulbright College of Arts & Sciences
517 Old Main ................................................................575-2509
Sam M. Walton College of Business
WCOB 328 .......................................................................575-4622
College of Education and Health Professions
Office of the Associate Dean, GRAD 317 .........................575-4205
College of Engineering
BELL 3189 .......................................................................575-5412

Housing
University Housing, 900 Hotz Hall ....................................575-3951

International Students
International Admissions, 346 N. Arkansas Ave..................575-6246
(Stone House North)
International Students and Scholars, 104 Holcombe Hall ...575-5003

New Student Orientation
Admissions, 232 Silas H. Hunt Hall .................................575-4200

Registration
Office of the Registrar, 146 Silas H. Hunt Hall ..................575-5451

ROTC
Air Force ROTC, 319 Memorial Hall ...................................575-3651
Army ROTC, 207 Military Science Building .......................575-4251

Student Affairs
Vice Provost for Student Affairs and Dean of Students
325 Administration Building .............................................575-5007

Testing (ACT, CLEP, LSAT, GRE, etc.)
Testing Services, 730 Hotz Hall ......................................575-3948
Toll-Free Number ..............................................................1-800-377-8632
The following offices may be reached by dialing this toll-free number between 8 a.m. and 4:30 p.m. each weekday:
Office of Admissions (undergraduate)
Office of Scholarships and Financial Aid
New Student Orientation

Transcripts, Academic Records
Office of the Registrar
146 Silas H. Hunt Hall .....................................................575-5451

University Switchboard ...................................................575-2000

Veterans Affairs
Veterans Certification Officer
146 Silas H. Hunt Hall .....................................................575-5454
Veterans Resource and Information Center
632 Arkansas Union .......................................................575-8742

University of Arkansas
Mailing Address:
Use an office and building address from above, plus:
1 University of Arkansas
Fayetteville, AR 72701
Telephone Area Code: 479

VOLUME 105, UNIVERSITY OF ARKANSAS CATALOGS — JUNE 2012
Editor: Charlie Alison
Published by University Relations, 106 Davis Hall,
University of Arkansas, Fayetteville, AR 72701.

ON THE COVER: The front entrance to Old Main is framed by maple leaves, crisp and yellow at the peak of autumn. The University of Arkansas is a four-season campus, so expect to see those limbs covered with a dusting of snow, verdant buds in the spring and thick, green foliage in the summer. (Photo by Russell Cothren)

The Office of Affirmative Action, Room 4, West Avenue Annex, has been designated to coordinate efforts to comply with the provisions of Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, and the Civil Rights Act of 1991.
Welcome to the University of Arkansas

This catalog of studies is a comprehensive reference for your years of study – a list of degrees, degree programs and courses offered at the University of Arkansas. In addition, it gives you valuable information such as suggested and required degree plans and information about costs, scholarships and financial assistance, and campus resources. Read it with pleasure and with care.

Take every opportunity to consult your academic adviser to ensure that you are taking advantage of courses and University resources that will help you reach your educational and career goals and graduate on time. If you are not sure where to find your academic adviser, contact the dean's office of your college; the phone numbers are listed on the preceding page. If your major is “undecided,” contact the advising office in the J. William Fulbright College of Arts and Sciences at 479-575-3307. Otherwise, call the dean's office in the college or school of your interest.

Remember, the University of Arkansas is committed to your success. The faculty and staff are here to support you as you work to achieve your goals. Ask for help and advice whenever you need it.

The University of Arkansas is committed to the policy of providing educational opportunities to all qualified students regardless of their economic or social status and will not discriminate on the basis of race, color, sex, creed, sexual orientation, disability, veteran's status, age, marital or parental status, or national origin.
The Catalog of Studies is published one time each summer by the Office of University Relations and the Office of Academic Affairs. This catalog and archived versions of the catalogs from previous years are available online at http://catalogofstudies.uark.edu/.

Students who enter a college within the University of Arkansas in the academic year of this catalog generally may expect to follow the graduation requirements set forth by that college in this catalog. Because the faculty of each college reserves the right to change graduation requirements, students should meet with their college advisers regularly to be certain that they are aware of any changes in graduation requirements that may apply to them.

Acceptance of registration by the University of Arkansas and admission to any educational program of the University does not constitute a contract or warranty that the University will continue indefinitely to offer the program in which a student is enrolled. The University expressly reserves the right to change, phase out, or discontinue any program.

The listing of courses contained in any University bulletin, catalog, or schedule is by way of announcement only and shall not be regarded as an offer of contract. The University expressly reserves the right to 1) add or delete courses or programs from its offerings, 2) change times or locations of courses or programs, 3) change academic calendars without notice, 4) cancel any course for insufficient registrations, or 5) revise or change rules, charges, fees, schedules, courses, requirements for degrees and any other policy or regulation affecting students, including, but not limited to, evaluation standards, whenever the same is considered to be in the best interests of the University of Arkansas.

Fayetteville, Arkansas
## 2012 Academic Calendar

### Summer Session I 2012 - First Six Weeks (29 Class Days)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 21</td>
<td>Classes begin</td>
</tr>
<tr>
<td>May 22</td>
<td>Last day to register, add a course, or change from audit to credit</td>
</tr>
<tr>
<td>May 24</td>
<td>Last day to drop without a mark of “W” or change from credit to audit</td>
</tr>
<tr>
<td>May 28</td>
<td>Memorial Day Holiday</td>
</tr>
<tr>
<td>June 18</td>
<td>Last day to drop a Session I class</td>
</tr>
<tr>
<td>June 29</td>
<td>Last day to officially withdraw from Session I</td>
</tr>
<tr>
<td>June 29</td>
<td>Last day of classes for Session I</td>
</tr>
</tbody>
</table>

### Summer Session II 2012 - Second Six Weeks (29 Class Days)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2</td>
<td>Classes begin</td>
</tr>
<tr>
<td>July 3</td>
<td>Last day to register, add a course, or change from audit to credit</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day Holiday</td>
</tr>
<tr>
<td>July 6</td>
<td>Last day to drop without a mark of “W” or change from credit to audit</td>
</tr>
<tr>
<td>Jul 30</td>
<td>Last day to drop a Session II class</td>
</tr>
<tr>
<td>August 10</td>
<td>Last day to officially withdraw from Session II</td>
</tr>
<tr>
<td>August 10</td>
<td>Last day of classes for Session II</td>
</tr>
</tbody>
</table>

### Summer Session III 2012 - Twelve Weeks (58 Class Days)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 21</td>
<td>Classes begin</td>
</tr>
<tr>
<td>May 24</td>
<td>Last day to register, add a course, or change from audit to credit</td>
</tr>
<tr>
<td>May 28</td>
<td>Memorial Day Holiday</td>
</tr>
<tr>
<td>May 31</td>
<td>Last day to drop without a mark of “W” or change from credit to audit</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day Holiday</td>
</tr>
<tr>
<td>July 17</td>
<td>Last day to drop a Session III class</td>
</tr>
<tr>
<td>August 10</td>
<td>Last day to officially withdraw from Session III</td>
</tr>
<tr>
<td>August 10</td>
<td>Last day of classes for Session III</td>
</tr>
</tbody>
</table>

### Summer Session IV 2012 - Ten Weeks (49 Class Days)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 4</td>
<td>Classes begin</td>
</tr>
<tr>
<td>June 6</td>
<td>Last day to register, add a course, or change from audit to credit</td>
</tr>
<tr>
<td>June 12</td>
<td>Last day to drop without a mark of “W” or change from credit to audit</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day Holiday</td>
</tr>
<tr>
<td>July 19</td>
<td>Last day to drop a Session IV class</td>
</tr>
<tr>
<td>August 10</td>
<td>Last day to officially withdraw from Session IV</td>
</tr>
<tr>
<td>August 10</td>
<td>Last day of classes for Session IV</td>
</tr>
</tbody>
</table>

### Summer Session V 2012 - First Five Weeks (24 Class Days)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 4</td>
<td>Classes begin</td>
</tr>
<tr>
<td>June 5</td>
<td>Last day to register, add a course, or change from audit to credit</td>
</tr>
<tr>
<td>June 6</td>
<td>Last day to drop without a mark of “W” or change from credit to audit</td>
</tr>
<tr>
<td>June 26</td>
<td>Last day to drop a Session V class</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day Holiday</td>
</tr>
<tr>
<td>July 6</td>
<td>Last day to officially withdraw from Session V</td>
</tr>
<tr>
<td>July 6</td>
<td>Last day of classes for Session V</td>
</tr>
</tbody>
</table>

### Summer Session VI 2012 - Second Five Weeks (25 Class Days)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 9</td>
<td>Classes begin</td>
</tr>
<tr>
<td>July 10</td>
<td>Last day to register, add a course, or change from audit to credit</td>
</tr>
<tr>
<td>July 11</td>
<td>Last day to drop without a mark of “W” or change from credit to audit</td>
</tr>
<tr>
<td>July 31</td>
<td>Last day to drop a Session VI class</td>
</tr>
<tr>
<td>August 10</td>
<td>Last day to officially withdraw from Session VI</td>
</tr>
<tr>
<td>August 10</td>
<td>Last day of classes for Session VI</td>
</tr>
</tbody>
</table>

### Fall 2012 (74 Class Days; 44 MWF, 30 TT)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 20</td>
<td>Classes begin</td>
</tr>
<tr>
<td>August 24</td>
<td>Last day to register, add a course, or change from audit to credit</td>
</tr>
<tr>
<td>August 31</td>
<td>Last day to drop without a mark of “W” or change from credit to audit</td>
</tr>
<tr>
<td>September 3</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>October 15-16</td>
<td>Fall Break (administrative offices will be open)</td>
</tr>
<tr>
<td>Oct. 29-Nov. 9</td>
<td>Priority Registration for Spring 2012</td>
</tr>
<tr>
<td>November 16</td>
<td>Last day to drop a full semester class</td>
</tr>
<tr>
<td>November 21</td>
<td>Thanksgiving Break (administrative offices open)</td>
</tr>
<tr>
<td>November 22-23</td>
<td>Thanksgiving Holiday</td>
</tr>
<tr>
<td>December 6</td>
<td>Last day to officially withdraw from all classes</td>
</tr>
<tr>
<td>December 6</td>
<td>Last day of classes for fall semester</td>
</tr>
<tr>
<td>December 7</td>
<td>Dead Day</td>
</tr>
<tr>
<td>December 10-14</td>
<td>Final exams</td>
</tr>
<tr>
<td>December 15</td>
<td>Commencement</td>
</tr>
</tbody>
</table>
## 2013 Academic Calendar

### Spring 2013 (73 Class Days; 43 MWF, 30 TT)

- **January 14**: Classes begin
- **January 18**: Last day to register, add a course, or change from audit to credit
- **January 21**: Martin Luther King Day
- **January 28**: Last day to drop without a mark of "W" or change from credit to audit
- **March 18-22**: Spring Break Week
- **April 19**: Last day to drop a full semester class
- **May 2**: Last day to officially withdraw from all classes
- **May 6-10**: Final exams
- **May 11**: Commencement
- **May 18**: Law School Commencement

### Summer Session I 2013 - First Six Weeks (29 Class Days)

- **May 20**: Classes begin
- **May 27**: Memorial Day Holiday
- **June 28**: Last day of classes for Session I

### Summer Session II 2013 - Second Six Weeks (29 Class Days)

- **July 1**: Classes begin
- **July 4**: Independence Day Holiday
- **August 9**: Last day of classes for Session II

### Summer Session III 2013 - Twelve Weeks (58 Class Days)

- **May 20**: Classes begin
- **May 27**: Memorial Day Holiday
- **July 4**: Independence Day Holiday
- **August 9**: Last day of classes for Session III

### Summer Session IV 2013 - Ten Weeks (49 Class Days)

- **June 3**: Classes begin
- **July 4**: Independence Day Holiday
- **August 9**: Last day of classes for Session IV

### Summer Session V 2013 - First Five Weeks (24 Class Days)

- **June 3**: Classes begin
- **July 5**: Last day of classes for Session V

### Summer Session VI 2013 - Second Five Weeks (25 Class Days)

- **July 8**: Classes begin
- **August 9**: Last day of classes for Session VI

---

### Monthly Calendar

- **May 2012**:
  - 1-27: **S M T W T F S**
  - 28: **Sunday**

- **June 2012**:
  - 1-30: **S M T W T F S**

- **July 2012**:
  - 1-31: **S M T W T F S**

- **August 2012**:
  - 1-31: **S M T W T F S**

- **September 2012**:
  - 1-30: **S M T W T F S**

- **October 2012**:
  - 1-31: **S M T W T F S**

- **November 2012**:
  - 1-30: **S M T W T F S**

- **December 2012**:
  - 1-31: **S M T W T F S**

- **January 2013**:
  - 1-31: **S M T W T F S**

- **February 2013**:
  - 1-31: **S M T W T F S**

- **March 2013**:
  - 1-31: **S M T W T F S**

- **April 2013**:
  - 1-30: **S M T W T F S**

- **May 2013**:
  - 1-31: **S M T W T F S**

- **June 2013**:
  - 1-30: **S M T W T F S**

- **July 2013**:
  - 1-31: **S M T W T F S**

- **August 2013**:
  - 1-31: **S M T W T F S**
UNIVERSITY OF ARKANSAS
Board of Trustees

Mike Akin
Chair
Monticello
Term Expires 2013

Jane Rogers
Vice Chair
Little Rock
Term Expires 2016

Jim von Gremp
Secretary
Rogers
Term Expires 2015

Ben Hyneman
Assistant Secretary
Jonesboro
Term Expires 2018

Sam Hilburn
Little Rock
Term Expires 2014

John H. Tyson
Springdale
Term Expires 2017

David Pryor
Fayetteville
Term Expires 2019

Mark Waldrip
Moro
Term Expires 2020

John Goodson
Texarkana
Term Expires 2021

Steve Broughton
Pine Bluff
Term Expires 2022
Administrative Officers

SYSTEM ADMINISTRATION
President, University of Arkansas  Donald Bobbitt, B.S., Ph.D.

CHANCELLOR AND VICE CHANCELLORS
Chancellor, University of Arkansas, Fayetteville  G. David Gearhart, B.A., J.D., Ed.D.
Provost and Vice Chancellor for Academic Affairs  Sharon L. Gaber, B.A., M.P.I., Ph.D.
Vice Chancellor for Finance and Administration  Donald O. Pederson, B.S., Ph.D.
Vice Chancellor for Government and Community Relations  Richard Hudson, B.A., M.A.
Vice Chancellor for University Advancement  Brad Choate, B.A., M.S.E.
Vice Chancellor for Intercollegiate Athletics  Jeff Long, B.A., M.A.

DEANS AND VICE PROVOSTS
Dean of Honors College  Bob McMath, B.A., M.A., Ph.D.
Dean of Dale Bumpers College of Agricultural, Food and Life Sciences  Michael Vayda, B.A., B.S., M.A., Ph.D.
Dean of Fay Jones School of Architecture  Graham F. Shannon, B.A., B.Arch., M.Arch.
Dean of J. William Fulbright College of Arts and Sciences  Robin Roberts, B.A., M.A., Ph.D.
Dean of Sam M. Walton College of Business  Eli Jones, B.S., M.B.A., Ph.D.
Dean of College of Education and Health Professions  Tom Smith, B.S.E., M.Ed., Ed.D.
Dean of College of Engineering  Terry Martin, B.S.E.E., M.S.E.E., Ph.D., interim
Dean of School of Law  Stacy L. Leeds, B.A., M.B.A., LL.M., J.D.
Dean of Graduate School and International Education  Todd Shields, B.A., M.A., Ph.D.
Dean of University Libraries  Carolyn Henderson Allen, B.S., M.S.
Dean of Students and Vice Provost for Student Affairs  Daniel J. Pugh, B.S., M.S., Ph.D.
Dean of Admissions and Vice Provost for Enrollment Services  Suzanne McCray, B.A., M.A., Ph.D.
Vice Provost for Academic Affairs  Ro DiBrezzo, B.S., M.S., Ph.D., Interim
Vice Provost for Distance Education  Javier Arturo Reyes, B.A., Ph.D.
Vice Provost for Diversity Affairs  Charles F. Robinson II, B.A., M.A., Ph.D.
Vice Provost for Planning  Kathy Van Laningham, B.A., M.A., Ph.D.
Vice Provost for Research and Economic Development  James Rankin, B.S.E.E., M.S.E.E., Ph.D.
Message from the Chancellor

Congratulations on your decision to study at the University of Arkansas. You’ve made a superb choice. If a world-class education is what you are seeking, then there probably has never been a better time in our 140-year history to study here. The spectacular success of the Campaign for the Twenty-First Century has allowed us to provide you with fantastic new educational, recreational, and residential facilities to accommodate the needs of today’s student. The 132 newly endowed faculty positions created by the campaign also have allowed us to both retain and attract some of the best teachers, scholars, and researchers found anywhere in the world. More importantly, the 1,738 new student scholarship and fellowship funds created by the campaign have allowed us to attract some of the most academically accomplished students we have ever had. The nation’s top students are now choosing the University of Arkansas in record numbers.

So pat yourself on the back. You’re part of our university’s trend toward excellence. I hope you’re as happy to be here as we are to have you. Our top priority at the University of Arkansas is putting you, the student, first. This means providing cutting edge curriculum that is relevant to current needs. This means reducing bureaucratic roadblocks and red tape, and doing everything we can to keep tuition and fee increases to an absolute minimum. We want you to have not only a great education, but a great experience, one you will value for the rest of your life.

I invite you to use this catalog of the University of Arkansas and become better acquainted with who we are and where we’re going. On behalf of the university community, we wish you all the best, and we hope this catalog encourages you to take advantage of the lifetime of opportunities awaiting you at the University of Arkansas.

Sincerely,

G. David Gearhart
Chancellor
University Profile

Vision

The University of Arkansas is a flagship university for the integration of student engagement, scholarship and research, and innovation that collectively transforms lives and inspires leadership for a global society.

History

Founded as a land-grant college and state university in 1871, the University of Arkansas opened its doors to students on January 22, 1872. Under the Morrill Land-Grant College Act of 1862, federal land sales provided funds for the new university, which was charged with teaching “agricultural and the mechanic arts,” “scientific and classical studies,” and “military tactics” to Arkansas scholars.

Statewide elections, held to establish bonds to help finance the University, eventually determined the school’s location. Washington County and the city of Fayetteville submitted the highest bid, a total of $130,000, to which was added a $50,000 state appropriation for the benefit of the institution and $135,000 from the sale of federal lands. With $12,000 of this money, the University purchased a 160-acre farm, the homestead of William McIlroy, and established its campus on a hilltop overlooking the Ozark Mountains.

There were few facilities and little money that first academic year, but the eight students and three faculty members who gathered for classes in 1872 showed the same dedication to learning and commitment to excellence that has carried the University of Arkansas into the 21st century. Over the past 140 years, the University has developed into a mature institution with nine schools and colleges, more than 950 faculty members, and 23,000 students. It serves as the major provider of graduate-level instruction in Arkansas. The research and scholarly endeavors of its faculty make it an economic and cultural engine for the state. And its public service activities reach every county in Arkansas, throughout the nation, and around the world.

Mission

As a land-grant university, the University of Arkansas strives to fulfill a three-fold mission of teaching, research, and service. In addition, as the flagship campus of the University of Arkansas System, the University of Arkansas in Fayetteville serves as the state’s major center of liberal and professional education and as Arkansas’ main source of theoretical and applied research.

Students pursue a broad spectrum of academic programs leading to baccalaureate, master’s, doctoral, and professional degrees, not only in traditional disciplines within arts, humanities, social sciences, and natural sciences, but also in the core professional areas of agricultural, food and life sciences; architecture; business; education; engineering; nursing; human environmental sciences; and law.

The University of Arkansas houses more than 200 academic programs and offers bachelor’s degrees in 75 fields of study. Students may also pursue a wide range of graduate degrees, including the Master’s, the Educational Specialist, the Doctor of Education, and the Doctor of Philosophy. Information about graduate programs can be found in the Graduate School Catalog or on the World Wide Web at http://grad.uark.edu/.

The Carnegie Foundation categorizes the University of Arkansas as a research institution with “very high research activity,” placing the University among the top 108 universities nationwide and in a class by itself within the state of Arkansas. In its 2011 edition, U.S. News and World Report ranked the University among the top tier of institutions of higher education. Faculty members perform cutting-edge research for which they annually win prestigious grants and awards, and the University encourages undergraduates to participate in the research process. Such opportunities enhance the learning process by providing hands-on experience in lab and research techniques, by developing students’ abilities to implement, experiment, discover and teach, and by fostering a mentoring relationship early in students’ academic careers.

Research programs involving both faculty and students serve as vital sources of information on the economic and social needs of Arkansas. In many fields, research performed at the University of Arkansas reaches beyond the state to provide insight and guidance on issues of national and international concern. The University provides extensive technical and professional services to varied groups and individuals throughout the state, helping to further Arkansas’ economic growth. The University operates nationally respected high school and college-level correspondence programs; it assists other institutions in developing educational programs; it offers graduate programs, both cooperatively and singly, throughout the state; and it makes specialized campus resources such as computing services and library holdings available to other institutions in the state.

Classes at the university maintain a 17-to-1 average ratio of students to instructor, although individual classes may range from a large general-lecture class of 200 to a focused special-topics class of 4 or 5 students. University of Arkansas students are given the tools and encouragement needed to excel. Over the last 15 years, Arkansas students have become Rhodes, Gates Cambridge, Madison, Marshall, Goldwater, Fulbright, Boren, Gilman and Truman scholars. Forty students have received National Science Foundation Graduate Research Fellowships.

Location

Fayetteville, a thriving city of 73,000 in the northwest corner of the state, is home to the University of Arkansas. Lying on the hilly western edge of the Ozark Mountains, the city boasts a lively cultural scene and easy access to outdoor recreation. The newly opened Crystal Bridges Museum of American Art in nearby Bentonville is the first major American art museum opened in the last 40 years and gives visitors a look at the most influential artists of the 18th, 19th and 20th centuries.

Northwest Arkansas remains one of the most economically stable regions in the nation, according to the U.S. Census, and was recently included among the top four “Best Places for Work” by CNN/Money. The region is the base of operations for Walmart Stores Inc., Tyson Foods Inc. and J.B. Hunt Transport Services, industry leaders in their respective fields.

Fayetteville’s temperate climate ensures beautiful seasons year-round. Major cultural amenities include the Walton Arts Center, just two blocks from campus, and the Crystal Bridges Museum of American Art in nearby Bentonville.

The Northwest Arkansas Regional Airport has direct flights to most major metropolitan areas, including Atlanta, Chicago, Cincinnati, Charlotte, Dallas, Denver, Houston, Las Vegas, Los Angeles, Minneapolis, New York and Orlando, and the city is within a day’s drive of several larger metropolitan areas, including Dallas, Kansas City, Little Rock, Memphis, St. Louis and Tulsa.
The academic units of the University of Arkansas, Fayetteville, include nine colleges and schools and two military departments: the Dale Bumpers College of Agricultural, Food and Life Sciences, which includes the School of Human Environmental Sciences; the Fay Jones School of Architecture; the J. William Fulbright College of Arts and Sciences, which includes the School of Social Work; the Sam M. Walton College of Business; the College of Education and Health Professions, which includes the Eleanor Mann School of Nursing; the College of Engineering; the School of Law; the Graduate School; the Honors College; and the Departments of Army and Air Force ROTC. In addition, the Division of Continuing Education offers non-credit course work, correspondence courses for credit, and off-campus credit courses in cooperation with colleges and schools at Fayetteville.

The School of Law and the Graduate School offer professional and graduate degrees. See the [Graduate Catalog](#) and the [Law School Catalog](#) for more information.

### Undergraduate Fields of Study

The following is a list of major fields of undergraduate study offered at the University of Arkansas, followed by a list of minors.

#### FIELDS OF STUDY BY COLLEGE AND SCHOOL

<table>
<thead>
<tr>
<th>College and School</th>
<th>Fields of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dale Bumpers College of Agricultural, Food and Life Sciences</strong></td>
<td>Agricultural Business</td>
</tr>
<tr>
<td></td>
<td>Agricultural Education, Communication and Technology</td>
</tr>
<tr>
<td></td>
<td>Animal Science</td>
</tr>
<tr>
<td></td>
<td>Biological Engineering (joint program with the College of Engineering)</td>
</tr>
<tr>
<td></td>
<td>Crop Management</td>
</tr>
<tr>
<td></td>
<td>Environmental, Soil, and Water Science</td>
</tr>
<tr>
<td></td>
<td>Food Science</td>
</tr>
<tr>
<td></td>
<td>Horticulture, Landscape and Turf Sciences</td>
</tr>
<tr>
<td></td>
<td>Poultry Science</td>
</tr>
<tr>
<td><strong>School of Human Environmental Sciences</strong></td>
<td>Apparel Studies</td>
</tr>
<tr>
<td></td>
<td>Foods, Human Nutrition, and Hospitality</td>
</tr>
<tr>
<td></td>
<td>General Human Environmental Sciences</td>
</tr>
<tr>
<td></td>
<td>Human Development, Family Sciences, and Rural Sociology</td>
</tr>
<tr>
<td><strong>Fay Jones School of Architecture</strong></td>
<td>Architecture</td>
</tr>
<tr>
<td></td>
<td>Architectural Studies</td>
</tr>
<tr>
<td></td>
<td>Interior Design</td>
</tr>
<tr>
<td></td>
<td>Landscape Architecture</td>
</tr>
<tr>
<td></td>
<td>Landscape Architectural Studies</td>
</tr>
<tr>
<td><strong>J. William Fulbright College of Arts and Sciences</strong></td>
<td>American Studies</td>
</tr>
<tr>
<td></td>
<td>Anthropology</td>
</tr>
<tr>
<td></td>
<td>Art</td>
</tr>
<tr>
<td><strong>Sam M. Walton College of Business</strong></td>
<td>Accounting</td>
</tr>
<tr>
<td></td>
<td>Business Economics</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
</tr>
<tr>
<td></td>
<td>General Business</td>
</tr>
<tr>
<td></td>
<td>Information Systems</td>
</tr>
<tr>
<td></td>
<td>International Business</td>
</tr>
<tr>
<td></td>
<td>Management</td>
</tr>
<tr>
<td></td>
<td>Marketing</td>
</tr>
<tr>
<td></td>
<td>Retail</td>
</tr>
<tr>
<td></td>
<td>Supply Chain Management</td>
</tr>
<tr>
<td><strong>Graduate School</strong></td>
<td>Biology</td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
</tr>
<tr>
<td></td>
<td>Classical Studies</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
</tr>
<tr>
<td></td>
<td>Criminal Justice</td>
</tr>
<tr>
<td></td>
<td>Drama</td>
</tr>
<tr>
<td></td>
<td>Earth Science</td>
</tr>
<tr>
<td></td>
<td>Economics (B.A.)</td>
</tr>
<tr>
<td></td>
<td>English</td>
</tr>
<tr>
<td></td>
<td>French</td>
</tr>
<tr>
<td></td>
<td>Geography</td>
</tr>
<tr>
<td></td>
<td>Geology</td>
</tr>
<tr>
<td></td>
<td>German</td>
</tr>
<tr>
<td></td>
<td>History</td>
</tr>
<tr>
<td></td>
<td>International Relations</td>
</tr>
<tr>
<td></td>
<td>Journalism</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
</tr>
<tr>
<td></td>
<td>Music</td>
</tr>
<tr>
<td></td>
<td>Philosophy</td>
</tr>
<tr>
<td></td>
<td>Physics</td>
</tr>
<tr>
<td></td>
<td>Political Science</td>
</tr>
<tr>
<td></td>
<td>Psychology</td>
</tr>
<tr>
<td></td>
<td>Social Work</td>
</tr>
<tr>
<td></td>
<td>Sociology</td>
</tr>
</tbody>
</table>

*Second (or dependent) Majors*

- African and African American Studies
- Asian Studies
- European Studies
- Latin American and Latino Studies
- Middle East Studies

*A student may pursue a second (or dependent) major if he or she is already pursuing a first major authorized to be given independently.
Undergraduate Fields of Study

College of Education and Health Professions
Career and Technical Education
Childhood Education
Communication Disorders
Community Health Promotion
Elementary Education
Human Resource Development
Kinesiology
Nursing
Recreation and Sport Management

College of Engineering
Biological Engineering
Biomedical Engineering
Chemical Engineering
Civil Engineering
Computer Engineering
Computer Science
Electrical Engineering
Industrial Engineering
Mechanical Engineering

Undeclared Major
Certain degree-seeking students who are temporarily undecided about their choice of a major field of study may select the undeclared major. However, all undergraduate students still must enroll in one of the colleges or schools. Each of these academic units makes provisions for undeclared majors and each has its own rules for the point at which a student must declare a major.

Minors
Each college and school of the University of Arkansas can determine whether to offer minors within their respective departments and whether to allow a student to pursue a minor in another college or school. Most, but not all, minors are offered in fields in which a major is also offered. Students should check with academic advisers in their college or school to determine the eligibility and requirements of a minor. They are listed below.

Interdisciplinary
Microelectronics-Photonics (administered by the Graduate School)
Sustainability (administered by the Provost’s Office)

Dale Bumpers College of Agricultural, Food and Life Sciences
Agricultural Business
Agricultural Communications
Agricultural Education
Agricultural Systems Technology Management
Animal Science
Crop Biotechnology
Crop Management
Entomology
Environmental, Soil, and Water Science
Equine Science
Food Science
Human Development and Family Sciences
General Foods and Nutrition
Global Agricultural, Food and Life Sciences
Horticulture
Journalism
Landscape Horticulture
Pest Management
Plant Pathology
Poultry Science
Turf Management
Wildlife Habitat
Minors offered by the J. William Fulbright College of Arts and Sciences
Minors offered by the Sam M. Walton College of Business

Fay Jones School of Architecture
Interior Design
Planting Design
Minors offered by any other UA college or school

J. William Fulbright College of Arts and Sciences
African and African American Studies
Anthropology
Arabic
Art History
Asian Studies
Biology
Business
Chemistry
Classical Studies
Communication
Drama
Economics
English
European Studies
French
Gender Studies
Geography
Geology
German
Historic Preservation
History
Japanese
Latin American and Latino Studies
Legal Studies
Mathematics
Medieval and Renaissance Studies
Middle East Studies
Music
Philosophy
Physics
Political Science
Psychology
Religious Science
Social Work
Sociology
Spanish
Statistics

Sam M. Walton College of Business
Accounting
Banking/Financial Management/Investment
Business Economics
Enterprise Resource Planning
Finance
Financial Economics
Information Systems
Insurance/Real Estate
International Business
Management
Marketing
Retail
Supply Chain Management
Undergraduate Fields of Study

College of Education and Health Professions
Recreation and Sport Management
Minors offered by any other UA college or school

College of Engineering
Minors offered by any other UA college or school

PRE-PROFESSIONAL PROGRAMS

Pre-Law
The University of Arkansas School of Law does not prescribe a specific pre-law curriculum and does not require any single "pre-law major." Prospective students are encouraged to select baccalaureate majors best suited to individual interests and abilities, and writing courses are often very valuable.

A baccalaureate degree is required for admission to the University of Arkansas School of Law, except for those students in the Dale Bumpers College of Agricultural, Food and Life Sciences or the Fullbright College of Arts and Sciences who are admitted to the special six-year program. All applicants for admission are required to take the Law School Admission Test.

Other Pre-Professional Programs
Fullbright College offers pre-professional programs and advisers in law, medicine, dentistry, optometry, medical technology, chiropractic, physical therapy, pharmacy, dental hygiene, occupational therapy, social work, and theology. The Dale Bumpers College of Agricultural, Food and Life Sciences coordinates the pre-veterinary medicine program.

ACCREDITATIONS

The University of Arkansas, Fayetteville, is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, available at (312) 263-0456, at http://www.ncahigherlearningcommission.org/ or by mail at 30 North LaSalle Street, Suite 2400, Chicago, IL 60602. Some colleges and programs are also accredited by other agencies, associations, or professional organizations, including those listed below.

Dale Bumpers College of Agricultural, Food, and Life Sciences
The Bachelor of Science in Human Environmental Sciences (B.S.H.E.S.) degree programs are accredited by the Council for Professional Development of the American Association of Family and Consumer Sciences. The degree program in dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics. The Nursery School and the Infant Development Center in the School of Human Environmental Sciences are accredited by the National Association for the Education of Young Children (NAEYC). The Bachelor of Science in Agricultural, Food and Life Sciences (B.S.A.) in food science is accredited by the Institute of Food Technologists. Teacher education programs in agriculture and family and consumer sciences are coordinated with educational programs in the College of Education and Health Professions and are accredited by the National Council for Accreditation of Teacher Education (NCATE).

Fay Jones School of Architecture
The Bachelor of Architecture (B.Arch.) program is accredited by the National Architectural Accreditation Board, and the Bachelor of Landscape Architecture (B.L.A.) program is accredited by the Landscape Architectural Accreditation Board of the American Society of Landscape Architects. The Bachelor of Interior Design (B.I.D.) degree is accredited by the Council for Interior Design Accreditation (CIDA).

J. William Fulbright College of Arts and Sciences
The Bachelor of Science (B.S.) degree program in chemistry is accredited by the American Chemical Society. The American Council on Education in Journalism and Mass Communications has accredited the Bachelor of Arts (B.A.) degree program in journalism. The Bachelor of Arts (B.A.), Bachelor of Music (B.M.), and Master of Music (M.M.) degree programs in the Department of Music are accredited by the National Association of Schools of Music. The Doctor of Philosophy (Ph.D.) degree program in clinical psychology is accredited by the American Psychological Association. The Bachelor of Social Work (B.S.W.) and the Master of Social Work (M.S.W.) degree programs are accredited by the Council of Social Work Education.

Sam M. Walton College of Business
The Sam M. Walton College of Business offers degree programs for undergraduate students and for graduate students at both the master's and doctoral levels and has been a member of and accredited by AASCB International, the Association to Advance Collegiate Schools of Business, since 1931. The accounting program was separately accredited in 1986 at both the bachelor's and master's levels. The master's in business administration program was approved in 1963. Accreditation by AACSB and membership in that organization signifies the college's commitment to AACSB goals of promoting and achieving the highest standards of business education.

College of Education and Health Professions
The teacher education programs in the College of Education and Health Professions are accredited by the National Council for Accreditation of Teacher Education. The M.A.T. program in childhood education is in compliance with the standards of the National Association for the Education of Young Children. The various M.A.T. licensure programs in secondary education are in compliance with the standards of the specialty organizations including National Council of Teachers of English, National Council of Teachers of Mathematics, National Science Teachers Association, and National Council for the Social Studies. The Master of Science degree program in speech pathology-audiology is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association. The Bachelor of Science in Nursing (B.S.N.) degree program is accredited by the National League for Nursing Accrediting Commission (61 Broadway Street, New York, NY 10006, 212-363-5555, Ext. 153) and is approved by the Arkansas State Board of Nursing. The Bachelor of Science in Education (B.S.E.) degree program in health science, kinesiology, recreation, and dance is accredited by the Council on Accreditation of the National Recreation and Park Association. The Master of Science degree in rehabilitation counseling is accredited by the Council on Rehabilitation Education.

College of Engineering
The College of Engineering offers the following programs accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone (410) 347-7700: Bachelor of Science in Biological Engineering (B.S.B.E.), Bachelor of Science in Chemical Engineering (B.S.Ch.E.), Bachelor of Science in Civil Engineering (B.S.C.E.), Bachelor of Science in Computer Engineering (B.S.Cmp.E.), Bachelor of Science in Electrical Engineering (B.S.E.E.), Bachelor of Science in Environmental Engineering (B.S.M.E.), Bachelor of Science in Mechanical Engineering (B.S.M.E.), and Master of Science in Environmental Engineering (M.S.En.E.).

The College of Engineering offers the following program accredited by the Computing Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone (410) 347-7700: Bachelor of Science in Computer Science (B.S.)

School of Law
The degree programs in the School of Law on the Fayetteville campus are accredited by both the American Bar Association and the Association of American Law Schools.
SPECIAL PROGRAMS AND OPPORTUNITIES

Honors Studies

Interested students should write to the Director of Honors Program in the appropriate college.

The honors program in the Bumpers College of Agricultural, Food and Life Sciences provides students with opportunities for intellectual enrichment beyond the traditional undergraduate experience. This is accomplished through honors courses, completion of an undergraduate capstone honors project or thesis, and other significant activities including interactions with students in honors programs in other colleges. The results of the student’s original research or creative project may be published in *Discovery*, the undergraduate research journal of the Bumpers College, or *Inquiry*, the universitywide journal of undergraduate research and creative activity. In support of these efforts, participants in the Honors Program are eligible to receive an honors stipend in support of their research projects. The transcript and diploma of each honors graduate will designate the student as an honors graduate of the college. At the college commencement ceremony, each honors graduate will wear special regalia and have the title of their honors thesis and their mentors’ names listed in the graduation program. Students must maintain a cumulative grade-point average of 3.50 and subscribe to the Statement of Ethical Standards to remain in the program. For additional information, see the Bumpers College section of this catalog.

The Fay Jones School of Architecture provides opportunities for students of superior academic and creative ability to enhance and enrich their professional and liberal education by participating in the School’s honors programs. For additional information, please see the Fay Jones School of Architecture section of this catalog.

To create an intellectual environment that will challenge the best of students, the J. William Fulbright College of Arts and Sciences provides a comprehensive program of honor studies. From the first year to the senior year, an honors student is provided the opportunity to study with other superior students in small distinctive classes taught by highly motivated and skilled faculty members. There are also opportunities for independent study so that students learn to work on their own and to develop their abilities and interests in ways that are not normally possible in regular college course work. Students participating in a program of honors studies also receive special academic counseling to satisfy their future career objectives. Students are offered every opportunity to achieve a high level of intellectual maturity and accomplishment. For additional information, see the Fulbright College section of this catalog.

The honors program in the Sam M. Walton College of Business is offered to high-achieving students interested in obtaining an outstanding business education at the University of Arkansas. Students who participate in the program will take honors classes in the University core and pre-business curriculum as well as honors colloquia in the Walton College offered exclusively to honors students. The subject matter of these colloquia varies from year to year and focuses on current business issues. Honors students complete a thesis in the senior year. Students in the honors program are entitled to register on the first day of registration week, have exclusive access to an honors computer lab and study area, and will be given priority consideration in such programs as the Arkansas Cooperative Education Program. For further information, see the Walton College section of this catalog.

The honors program in the College of Education and Health Professions enables undergraduate students who have demonstrated potential for outstanding scholarship achievement an opportunity to broaden and deepen their liberal and professional education. Honors students participate in honors seminars, leadership skills development and a required undergraduate thesis/project. Students are provided opportunities to enhance their learning experience through critical thinking, leadership skills development and independent study. For additional information, see the College of Education and Health Professions section of this catalog.

The College of Engineering has established an honors program to challenge superior students with a more in-depth academic program and research experience and to provide a structure for working more closely with faculty members and other students in a team environment. An honors program is highly recommended for individuals planning academic or research-related careers that require considerable critical and original independent thinking. Students must formally apply for admission to the Engineering Honors Program. Once accepted into the program, honors students take a minimum of 12 hours of honors courses (a minimum of 6 of these 12 hours must be in engineering), participate in undergraduate research and write an undergraduate thesis, and must fulfill any additional departmental requirements. To graduate with honors, a student must hold a cumulative GPA of 3.50 or better for all course work, computed at graduation. For more information, see the College of Engineering chapter of this catalog.

Campuswide Academic Honor Societies

For other academic honor societies, see the various school and college sections of this catalog.

Golden Key is an academic honor society open to selected juniors and seniors who have a minimum grade-point average of 3.50.

Order of Omega honor society is exclusive to members of the Greek community on the University campus. Selection of members is based upon leadership in the inter-Greek activities, academic honors, and contributions to the University community. A 2.50 GPA is necessary for membership consideration.

Phi Eta Sigma is an academic honor society for freshman students. Membership is selected in the spring each year, and the only requirement is a minimum GPA of 3.50 or better for the first semester of the freshman year.

Phi Kappa Phi is a national honor society whose primary objective is the recognition and encouragement of superior scholarship in all academic disciplines. Junior and senior undergraduate students who have a minimum GPA of 3.85 are eligible for membership. Also eligible are graduate students, registered for one year, who have a minimum GPA of 3.85.

Tau Alpha Upsilon is an honor society that honors outstanding students who live in the University of Arkansas Residence Hall system.

Who’s Who, a general honor society, honors students who have excelled in scholarship, leadership and campus activities throughout their college careers. Membership requirements are a minimum cumulative GPA of 2.00, completion of 85 credit hours, and at least two full semesters attendance at the University of Arkansas, Fayetteville, prior to application.

Campuswide Leadership Honor Societies

Blue Key is a service-oriented honor fraternity that recognizes outstanding scholarship, leadership and involvement in campus activities. Applicants must be classified as juniors and meet a minimum GPA of 2.75 for membership consideration.

Cardinal Key is a junior service-oriented honor society whose membership selection is based on scholarship, leadership, and community and campus activities. A 3.00 GPA requirement must be met in order to be considered for membership at the end of the sophomore year.

Cardinal XXX is a service-oriented honor society whose membership consists of a select group of sophomores. Membership selection is based on scholarship, leadership, and community and campus service. A 3.00 GPA is required for consideration, and selection is made at the end of the freshman year.

Gamma Beta Phi is a service-oriented honor society established to recognize and encourage excellence in education. Membership in the organization is open to students who are in the top 20 percent of their class.

Mortar Board is a senior honor society that considers outstanding scholarship, leadership, and service to the campus and community when selecting members. Applicants must have a 3.00 GPA in order to be eligible for consideration.

Graduate and Professional Study

The University of Arkansas is the major center for comprehensive graduate-level instruction in the state, offering students the opportunity to continue their studies or to specialize in a particular field through the Graduate School. The University offers a wide range of graduate degrees, including the master’s, the Educational Specialist, the Doctor of Education, and the Doctor of Philosophy. Non-degree graduate certificates are also offered. Information about graduate programs may be found in the Graduate School Catalog or on the World Wide Web at http://www.uark.edu/grad/.

The School of Law on the Fayetteville campus offers a juris doctor degree program for qualified students with a bachelor’s degree, and it offers the nation’s only master’s program in agricultural law for students with a law degree. Further information concerning professional study may be obtained by contacting the School of Law dean’s office for a copy of the current catalog: University of Arkansas School of Law,
Undergraduate Fields of Study

Reserve Officer Training Corps

A true job training program, ROTC is offered at the University of Arkansas through both the U.S. Air Force and the U.S. Army. Each department provides a unique, career-oriented set of courses relevant to future leadership positions within its particular branch. In addition to studying Aerospace Education or Military Science, students interact with one another in a practical setting as they examine and apply the dynamics of leadership, management, ethics, communication, and teamwork. Participants are given the background and comprehensive building blocks to become commissioned officers in the U.S. military, if qualified. Physical activities and summer orientation programs are enhanced with continually updated curriculums. Classes are taught by military personnel, ensuring realistic perspectives on the military professions.

In the finest traditions of the University of Arkansas and the ROTC programs, students are challenged to grow, develop and assume responsibilities throughout their academic years. Underlying that teaching is a foundation of service, integrity and excellence - expected and demanded of all officer candidates. Scholarships and details of the two programs are found in the ROTC chapter of this catalog. Army ROTC is located in the Army ROTC building, 479-575-4251 or toll free 1-866-891-5538, http://www.uark.edu/armyhog/. Air Force ROTC is located in 319 Memorial Hall, 479-575-3651, http://www.uark.edu/~afrotc/.

Cooperative Education Program

Cooperative Education is a unique program offered by the Office of Career Services that allows students to alternate between going to school and working in their chosen vocation. In addition, the program allows employers the opportunity to train and evaluate future employees before offering them positions.

Employment assignments are diversified to provide students with a variety of experiences related to their major field and with work of increasing difficulty and responsibility. Although the primary objective is to supplement theoretical knowledge with practical experience, students earn full-time pay while on work assignments. This benefit produces welcome income while the students are still pursuing a degree.

Positions are available to students in many disciplines, primarily engineering, architecture, landscape architecture, business, agriculture, natural science and mathematics. Co-op students must be in good academic standing, must be at least 18 years of age, must be making normal progress toward a degree, and must meet the specific requirements of their college. (For example; the College of Engineering and Dale Bumpers College of Agricultural, Food and Life Sciences require completion of the freshman year; Fulbright College of Arts and Sciences requires 45 credit hours and a 2.5 grade-point average; the Walton College of Business requires completion of pre-business program requirements; and the Fay Jones School of Architecture requires completion of the junior year.) In addition, employers may establish their own academic criteria for selecting students.

For further information, contact the Career Development Center, 607 Arkansas Union, 479-575-2805.

Study Abroad

The University encourages the expansion of students' educational experiences through study abroad. Student exchange programs have been established with Kansai University and Shimane University (Japan), Hankuk University (Korea), Al-Akhawayn University (Morocco), University of Graz (Austria), University of Essex (England), University of Maine (France), and Carlos III University of Madrid (Spain). Other UA study abroad programs include summer/semester/year-long programs in Austria, England, Scotland, Costa Rica, Ireland, France, Germany, Italy, Mexico, and Spain. A limited number of scholarships and travel grants are available each year for these programs.

For more information about study, work, and travel abroad, contact the Office of Study Abroad, a division of the Global Campus, School of Continuing Education and Academic Outreach, 722 W. Maple, 479-575-7582. Students in the Bumpers College of Agricultural, Food and Life Sciences may contact International Agricultural Programs, 307 Hotz Hall, 479-575-6727. Students in the Walton College of Business may contact the Undergraduate Programs Office at 479-575-4622. Students in the College of Engineering may contact the Assistant Dean for International Programs at 479-575-7236.
Enrollment Services

Office of Enrollment Services
232 Silas Hunt Hall, 479-575-3771
Vice Provost for Enrollment and Dean of Admissions
Suzanne McCray
Admissions
232 Silas Hunt Hall, 479-575-5346
Academic Scholarships
101 Old Main, 479-575-4464
ISIS
500 Hotz Hall, 479-575-2468
Financial Aid
114 Silas Hunt Hall, 479-575-3806
Academic Success
055 Gregson Hall, 479-575-2989
Nationally Competitive Awards
232 Silas Hunt Hall, 479-575-7940
New Student Orientation
232 Silas Hunt Hall, 479-575-4200
Registrar
146 Silas Hunt Hall, 479-575-5451
World Wide Web:
http://admissions.arkansas.edu/
E-mail: uofa@uark.edu

MISSION

Enrollment Services seeks to enroll a diverse group of capable students, who will engage and excel at the University of Arkansas, and to assist these students in achieving their academic and career goals.

The mission of the Enrollment Services Division of the University of Arkansas is to enroll and graduate students who will engage fully in academic and service programs, develop intellectually and personally, and contribute to the campus, the state, and the global community. Encouraging academic engagement from a diverse group of communities will create a dynamic educational environment that will promote a broad learning experience for the entire campus community. To carry out this mission, the Enrollment Services Division is comprised of eight professional and service-oriented offices: Academic Success, Admissions, Financial Aid, Nationally Competitive Awards, Orientation, Registrar, ISIS, and Scholarships. Through collaborative efforts, Enrollment Services strives to:

• Attract, admit, and prepare new and returning students for enrollment on campus while working with academic affairs to ensure planned and sustainable growth in accordance with institutional priorities;
• Accurately and efficiently reduce financial obstacles through federal, state, institutional scholarship and aid programs;
• Commit to preparing traditional and non-traditional students, including returning adult learners, for academic achievement and success in life;
• Assist future, current and former students as they navigate the administrative requirements to achieve their academic goals;
• Ensure accuracy for registration and academic records;
• Commit to retaining students who enroll at the University of Arkansas and assisting them through academic transitions on their path to graduation;
• Prepare students to be nationally competitive;
• Craft and maintain policy that facilitates effective administration to support Division goals, including coherence of policy across all divisions;
• Develop innovations in the use of technology and information systems aimed at supporting a research engine for best practices in enrollment services and data-based decision making;
• Increase state and global knowledge by achieving a net increase in Arkansas residents holding bachelor’s, master’s, and doctoral degrees;
• Support the University’s pursuit to become a nationally recognized research institution that puts students first.

ADMISSION

UNDERGRADUATE ADMISSION

Any person who intends to register for a course at the University of Arkansas must first be admitted to the University. Students returning to the University after an absence of a fall or spring semester must also complete an application.

The University offers a variety of services to students with physical or learning disabilities through the Center for Educational Access. Students with any type of physical or learning disability are strongly encouraged to contact that office in Room 104 of the Arkansas Union, or call 479-575-3104 (TDD/Voice) to learn more about the specific nature of its services and the overall accessibility of the University.

The University reserves the right to modify admission requirements. Application forms and the most current information about admission requirements are available from the Office of Admissions. Please send all application materials and supporting documents to the following address:

Office of Admissions
232 Silas H. Hunt Hall
1 University of Arkansas
Fayetteville, AR 72701
Telephone: 479-575-5346 or 1-800-377-8632
http://admissions.arkansas.edu/
When to Apply
Students interested in applying to the University of Arkansas for the fall semester are urged to apply by the November 15 preferential deadline. Early admits are given priority when applying for new student orientation and university housing. The preferential application deadline for the spring term is November 1. Applicants for freshman scholarships are encouraged to apply for admissions and complete the separate scholarship application by the priority deadline, November 15. Applicants for entering transfer scholarships should submit completed applications to the Office of Admissions and the Office of Academic Scholarships no later than April 1, for the fall semester, and October 1, for the spring semester.

Deadlines for Admission Consideration
Applications and required transcripts must be received in the Office of Admissions by the following deadlines to be accepted for the respective enrollment periods.

- Fall – August 1
- Spring – December 20

Students who are unable to submit their applications by the deadline may be denied admission and considered for admission for the following term.

International students should refer to "Admission of International Students" in this chapter for application deadlines, procedures, and requirements.

How to Apply
1. Submit a completed application for undergraduate admission and a $40 non-refundable application fee to the Office of Admissions. You may apply for admission online at http://apply.uark.edu.
2. Request that all required transcripts be sent to the Office of Admissions. Only official transcripts will be accepted. Transcripts are not considered official unless submitted in a sealed, stamped envelope, or sent via electronic data interchange from the previous institution. Questionable or unreadable transcripts may be refused.
3. High school transcripts are required of all entering freshmen and transfer students with fewer than 24 transferable semester hours. A preliminary admission will be provided to high school seniors on the basis of sixth- or seventh-semester transcripts.

College transcripts must be from each college or university attended. Transcripts must be sent directly to the Office of Admissions from each institution attended, in an official sealed school envelope, or sent via electronic data interchange.

4. All new freshman and transfer students with fewer than 24 transferable credit hours must submit ACT or SAT scores. Non-traditional students applying three or more years after high school graduation have the option of submitting the ACT COMPASS to satisfy testing requirements. The University will not accept test scores taken more than five years prior to enrollment. Test scores should be sent directly to the University by the testing agency. The University's institutional codes are: ACT-0144; SAT-6866.

5. All students born after January 1, 1957, must submit immunization health records to the Pat Walker Health Center after admission. Immunization proof is required prior to first registration. See http://health.uark.edu/forms/ImmunizationCompliance.pdf.

6. English Proficiency: Applicants whose native language is not English must submit a Test of English as a Foreign Language (TOEFL) score of at least 550 (paper based), 79 (internet based), or a minimum score of 6.5 on the IELTS (writing) taken within the preceding two years. Students who have completed grades 10-12 at a U.S. accredited high school and have a satisfactory ACT English subscore may request a waiver of this requirement. Students transferring from an accredited U.S. institution (or institution in a country where English is the native language) with at least 24 transferable credit hours and successful completion of English Composition I and II with a grade of "C" or above will not be required to submit the TOEFL or IELTS for admission consideration. For more information about the TOEFL, you may write to TOEFL Services, ETS, PO Box 899, Princeton, New Jersey 08541, or visit http://www TOEFL.org/.

7. The University shall admit only those applicants whose enrollment will not be detrimental to the quality of life and the educational programs of the University. The Admissions and Appellate Board has final authority to interpret University admission or transfer policy and to grant a variance. An applicant who has withheld pertinent information regarding educational background or who has falsified information or credentials may be denied admission to the University or, if enrolled, may be immediately withdrawn.

ADMISSION OF ENTERING FRESHMEN,
ACADEMIC YEAR 2012-13

Applications are reviewed on an individual basis with consideration given to the applicant's overall grade-point average (GPA), core GPA, class rank, and standardized test scores. New freshmen and those transfer students with fewer than 24 transferable semester hours should have taken or be completing the following college preparatory curriculum in high school:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>1 unit general sciences</td>
<td>2</td>
</tr>
<tr>
<td>2 units lab sciences</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
</tr>
</tbody>
</table>

Students who have taken these course requirements and who have a high school overall GPA of at least 3.00 and an ACT of 20 (or SAT of 930 combined critical reading and math) or better meet the general admission requirements. Students not meeting these criteria are still encouraged to apply and will be reviewed for possible admission by the Admissions and Appellate Board.

Accelerated Admission
Superior high school students who have completed a rigorous college preparatory curriculum may seek admission to the freshman class at the end of their junior year of high school. Applicants for accelerated admission are required to complete certain required subjects during three years of high school study, to submit letters of recommendation, and to submit an ACT or SAT score equivalent to at least the 90th percentile of the University's previous entering class. Additional information and application materials may be obtained by visiting or calling the Office of Admissions at 1-800-377-8632 or online at http://admissions.uark.edu.

ADMISSION OF TRANSFER STUDENTS

Transfer Admission Requirements
Applicants who have attended other colleges or universities after high school graduation are considered transfer students. The applicant must submit official transcripts of all previous college courses attempted whether or not credit was earned and regardless of whether the applicant wishes to transfer any credit. This transcript must be sent directly to the Office of Admissions from each institution attended. All transfer students must meet the following requirements:
1. Have a cumulative GPA of at least 2.00 on all course work attempted, and
2. Be eligible to return to the last institution attended. Grade-point average is
   calculated on all coursework attempted.

Students who have completed fewer than 24 transferable semester hours must,
in addition to the above requirements, meet all requirements for freshman admission
(see Admission of Entering Freshmen). Test scores and transcripts are also evaluated
to determine whether State of Arkansas requirements for developmental course place-
ment have been met. (See page 25.) For policies regarding transfer of credit from other
institutions, see page 41.

ALUMNI OF A
an auditor) on a space-available basis; however, special students are not eligible
for verification to the department by official documentation that University course
deficiencies will retain that status as a special, non-degree student.

Admission as a special, non-degree seeking student is not intended to serve as a
means to a degree program at the University of Arkansas. Students who have been denied regular undergraduate admission are not eligible for this status.

Non-degree seeking students must meet course prerequisites and should be
prepared to verify to the department by official documentation that University course
prerequisites have been met, if appropriate. Students planning to enroll in any upper-
division education courses should verify admission to the Teacher Education Program
prior to registration. A non-degree seeking student may not enroll for more than nine
hours of courses in a term without approval of the student's academic dean. No more
than 24 semester hours earned while in a non-degree seeking status will apply to a
degree at the University.

Unless otherwise specified, students with non-degree seeking status who wish
to be admitted into a degree program at the University of Arkansas must apply for
admission as such prior to the beginning of the term for which the change of status is
requested. All requirements for admission to regular status must then be met, except
for students in the provisional non-degree-seeking status.

When to Apply
Non-degree seeking students must meet the same application deadlines as other
students. See the Deadlines for Admission Consideration on the previous page for
deadlines.

How to Apply
The following students may be considered for non-degree seeking status:
1. Visiting students who attend other colleges or universities and wish to enroll
   at the University to earn credits that they plan to transfer back to their home
   institution. It is the student's responsibility to verify with his or her college
   that courses taken here will be acceptable as transfer credit.
   Application procedure: Submit a completed application, a non-refundable
   application fee, and a letter of good standing verifying eligibility to return to
   the home institution.

2. Students who want to take courses of special interest for personal or profes-
sional development but who are not interested in working toward a degree
are considered non-degree seeking students. Applicants in this category are
normally expected to have been out of high school for five or more years.
   Application procedure: Submit a completed application and non-refund-
able application fee. Students who have been out of high school less than
five years should submit a transcript and test scores verifying that admission
requirements have been met.

   The application fee is not required for residents of Arkansas who are 60
years and older and wish to participate in the senior tuition waiver program.
   A PDF is available at http://admissions.arkansas.edu/senior_citizens_flyer.
pdf.

3. Students who already have a college degree and who want to take credit
   classes but not toward another degree at this time. They are considered non-
degree seeking. Credits earned under this classification will not count toward
   a graduate degree.
   Application procedure: Submit a completed application and non-refund-
able application fee. Students who wish to enroll for successive terms should
   submit a transcript showing the degree.

4. Dually enrolled high school students must have at least a 20 ACT score and
   a 3.00 high school GPA to enroll. Dually enrolled high school students are
   ineligible to enroll in remedial courses.
   Application procedure: Submit a completed application, a non-refundable
   application fee, ACT or SAT scores, high school transcript, letter of intent
   regarding courses in which the student wishes to enroll, and a letter of
   recommendation from the high school principal or counselor. Admissions
   applications should be submitted at least one month in advance of the term.

   Dually enrolled high school seniors who plan to enroll in the fall as
regular freshmen must submit a separate application for regular admission for
the fall.

REQUIREMENTS OF RETURNING UNIVERSITY OF ARKANSAS STUDENTS

Any former student who wishes to return to the University after missing a fall or
spring semester must complete an application for admission. Students enrolled in
University of Arkansas correspondence courses during their absence must be readmit-
ted. A $40 non-refundable application fee is required for former students.

When to Apply
An early readmission will enable a student to register during priority registration.
The student should submit an application and all appropriate credentials at least one
month prior to the time of registration. Registration dates and procedures are found
on the schedule of classes online at http://registrar.uark.edu/465.php.

Deadlines for Admission Consideration
Applications and required transcripts must be received in the Office of Admis-
sions by the following deadlines to be accepted for the respective enrollment periods:
Fall – August 1
Spring – December 20

Students who are unable to submit their applications by the deadline may be
denied admission and considered for admission for the following term.

Requirements
1. Students must be academically eligible to return to the University and are re-
   admitted with the same academic status as held during their last attendance.
   Course work taken at another institution will not affect a student's produ-
tory status or University GPA. Students may change degree programs on
re-admission to the University of Arkansas regardless of academic status, ex-
cept for students entering the College of Engineering. A student who is not
in good standing may not enter the College of Engineering. Students who have not satisfied their initial provisions of admission (but are still eligible to return) will be required to satisfy those conditions upon their return.

2. Students who have attended another institution while away from the University will be considered returning transfer students and must have either a 2.00 GPA on all college work attempted and/or a 2.00 GPA on all course work attempted since last attending the University of Arkansas. Official transcripts of all course work attempted since last attendance at the University must be submitted. (See Admission of Transfer Students.)

3. F. Students who previously attended or currently attend the University as special, non-degree seeking students and wish to return as degree-seeking candidates must apply for admission as freshmen or transfer students, furnishing all appropriate admission credentials, including any required test scores. All requirements for admission to regular status must be met. (See appropriate section of this catalog for requirements.)

4. Former students who are submitting petitions to either the Academic Standards Committee or the Admission and Appellate Board to request readmission must have on file all required documents by the application deadlines. (See the schedule of classes for deadlines for submitting petitions.)

ADMISSION OF INTERNATIONAL STUDENTS

All international students must present officially certified academic credentials, evidence of adequate financial support, and, for non-native English speakers only, a minimum TOEFL score of 550 (paper based), 79 (Internet based), or a minimum score of 6.5 on the IELTS, taken within the preceding two years. Students who have completed grades 10-12 at a U.S. accredited high school and have a satisfactory ACT English subscore may request a review for waiver of this requirement. Students transferring from an accredited U.S. institution (or institution in a country where English is the native language) with at least 24 transferable credit hours and completion of English Composition I and II with a grade of “C” or above will not be required to submit the TOEFL or IELTS for admission consideration.

Applicants who meet the academic and financial requirements but who do not meet the English proficiency requirement of the University will be offered conditional admission to attend an intensive English program through the Spring International Language Center. Students will be eligible to enroll in University of Arkansas academic courses upon successful completion of the highest level of the intensive English program with a 3.00 grade average and recommendation of the director of Spring International.

An entering freshman who has completed secondary school at either U.S. or foreign institutions must have a) the equivalent of a final cumulative GPA of at least 2.75 and b) competency equivalent to that developed by taking four years of English and three years each of mathematics, natural sciences, and social studies, and an additional three units of electives chosen from English, speech, foreign languages, mathematics, natural sciences, or social studies in U.S. high schools.

A student transferring with fewer than 24 semester hours of post-secondary coursework at either U.S. or foreign institutions must a) have a cumulative GPA of at least 2.50 (or its equivalent) on all post-secondary coursework attempted, and b) meet the requirements specified for entering freshmen. A student transferring from either a U.S. or foreign post-secondary institution with at least 24 semester hours must have the equivalent of a cumulative GPA of at least 2.50 on all post-secondary course work attempted.

A non-refundable application fee of $50 is required for all international applicants. All applications and supporting documents must be submitted by May 31 for the fall semester; October 31 for the spring semester; and March 1 for the summer sessions.

Any international student returning to the University after an absence of a full semester (fall or spring) or more must submit an application for admission. For these students, the application deadlines are August 15 for the fall term and January 1 for the spring term. It should be noted that a student previously enrolled at the University of Arkansas who takes a full term of courses elsewhere and then seeks readmission to the University returns as a transfer student and must meet University admission requirements for international transfer students, submit a photocopy of the I-20 issued by the transferring institution, and submit a new financial statement. An application fee is not required for returning students.

For specific admission requirements and application materials pertaining to students on F-1, J-1, or any non-immigrant visas, applicants should write directly to the International Admission Office, 346 N. Arkansas Avenue, STON 50, 1 University of Arkansas, Fayetteville, Arkansas 72701, or call 1-479-575-6246 or e-mail iao@uark.edu.

Please see the section “Placement and Proficiency Tests” on this page for University policy regarding English language use by non-native speakers.

ACADEMIC BANKRUPTCY

Students returning to the University after an absence of five or more years may be eligible to declare academic bankruptcy if they meet the following criteria:

1. Must have been enrolled previously at the University of Arkansas, Fayetteville, as an undergraduate student and be returning as an undergraduate student.

2. Must not have been enrolled at the University during the previous five years.

3. Students who have attended another institution since their last attendance at the University must meet requirements for transfer students (2.00 GPA on all coursework attempted more than five years after last enrollment at the University of Arkansas, Fayetteville) to be eligible for readmission.

4. Must submit an application for readmission and official transcripts of all college work attempted since last attendance at the University of Arkansas by the application deadlines and submit a Declaration of Academic Bankruptcy form to the Office of the Registrar. The form is available at http://registrar.uark.edu/1621.php. The following are the conditions of academic bankruptcy:

a. Students will forfeit all credit hours previously awarded by the University of Arkansas, Fayetteville. This includes course work completed at the University (regardless of grades earned), courses accepted in transfer, credit by examination, and any correspondence course work awarded.

b. A new calculation of GPA and credit hours will begin when the student returns to the University.

c. The transcript will reflect the student’s complete record (including all previous college work) with an added notation of “Academic Bankruptcy Declared.”

d. Courses taken at another institution within five years of the last University of Arkansas enrollment will not be accepted for transfer. Course work completed more than five years after last attending the University of Arkansas may be accepted in transfer, subject to university transfer credit policies. For purposes of this policy, University of Arkansas correspondence coursework will be treated in the same manner as transfer work.

e. For the University to provide appropriate advising and (as required by Arkansas Act 1052) appropriate assessment, a student may be required to submit ACT, SAT, or ACT COMPASS test scores prior to registration for classes if, as a result of academic bankruptcy, that student is returning to the University as a freshman with fewer than 24 transfer hours.

PLACEMENT AND PROFICIENCY TESTS

ACT, SAT and ACT COMPASS scores are used to determine placement in University courses. Students whose scores indicate the need for additional preparation may be placed in courses designed to prepare them for college-level work. (See Arkansas Requirements for Developmental Course Placement on page 25.) Credit earned in such courses does not count toward degrees in all colleges. (See Courses That Do Not Count toward Degrees, page 26.)

Freshman Composition Placement

- Students with ACT English scores lower than 19, SAT verbal scores lower than 470, or ACT COMPASS writing skills lower than 75 should enroll in the course sequence ENGL 0003, ENGL 1013, and ENGL 1023.
Students with ACT English scores of 19-27, SAT verbal scores of 480-620, or ACT COMPASS writing skills of 75 or higher should enroll in ENGL 1013 and ENGL 1023.

Students with ACT English scores of 28-29 or SAT verbal scores of 630-670 may enroll in ENGL 1013 and ENGL 1023 or in Honors English (ENGL 1013H and ENGL 1023H).

Students with ACT English scores greater than 29 or SAT verbal scores greater than 680 may enroll in Honors English (ENGL 1013H and ENGL 1023H) or elect exemption.

Some degree programs require credit in composition, and students should confer with their advisers before exempting.

The Math Placement Test

All new first-year freshman students will be required to take the online mathematics placement assessment, available starting in April. To take the assessment, or for more information regarding it and its requirements, visit the University of Arkansas Mathematical Sciences at http://math.uark.edu/

Speech Communication Exemption Examination

Students who have had speech in high school and/or experience in public speaking may elect to take this test for exemption from or credit in COMM 1313. Both the written and oral (a five-minute impromptu speech) examinations must be passed to receive exemption or credit.

Foreign Language Placement Examinations

Students with previous foreign language experience in French, German, or Spanish are encouraged to take language placement examinations offered during summer orientation. Those test scores will be used by academic advisers to determine an appropriate foreign language placement level. Students who omit one or more courses in the basic language sequence will receive credit for omitted courses when they have validated their high placement by passing the course into which they were placed with a "C" or better. Conversation courses (3033, 4033) and correspondence courses may not be used to validate such prior knowledge; and no degree credit (graduation credit) is awarded for a foreign language 1003 course to students in the J. William Fulbright College of Arts and Sciences unless they completed two years of a different language in high school.

General Chemistry Placement Examinations

These tests will be offered throughout the year. Students who performed at average levels in high school chemistry may find it to their advantage to enroll directly in the second semester of general chemistry. This examination is designed to provide guidance in making this course selection. Students who place into the second semester of general chemistry and earn a grade of "C" or better in the course will also receive credit for the first semester of the course.

English Language Use by Non-Native Speakers

Non-native speakers of English admitted to undergraduate study at the University of Arkansas are required to present an acceptable score on one of the following tests: TOEFL (TWE), Internet based TOEFL (iBT) (writing), IELTS (writing), or ELPT (writing). Depending upon exam scores, a student may be required to take one or more EASL courses prior to the beginning of classes in their first term of study.

Non-native speakers in the following categories are exempt from this requirement:
1. Undergraduate students who transfer at least 24 hours of credit from U.S. institutions, including courses that meet the freshman composition requirement;
2. Undergraduate students who have completed grades 10 through 12 in and graduated from a U.S. high school and have obtained an ACT English section score of 19 or above or a SAT verbal score of 460;
3. Graduate students who earned bachelor's or master's degrees from U.S. institutions or from foreign institutions where the official and native language is English;
4. Undergraduate students with a Test of Written English (TWE) score of 5.0 or iBT writing score of 28 or IELTS writing score of 6.5;
5. Graduate students with a Test of Written English (TWE) score of 5.0 or iBT writing score of 29 or IELTS writing score of 7.0;
6. Graduate students with a GRE Analytical Writing score of 4.5 or GMAT Analytical Score of 4.5.

Diagnostic and placement testing is designed to test students' ability to use English effectively in an academic setting, and its purpose is to promote the success of non-native speakers in completing their chosen course of study at the University of Arkansas. Test results provide the basis for placement into English as a Second Language (EASL) support courses or course sequences. Courses are offered by the Department of Foreign Languages for those students whose language skills are diagnosed as insufficient for college-level work at the level to which they have been admitted (undergraduate or graduate study). Credit in EASL courses does not count toward University of Arkansas degrees. Non-native speakers diagnosed as having language competence sufficient for their level of study will not be required to enroll in EASL courses.

The ELPT is administered by Testing Services during New Student Orientation and there is a $10.00 charge. Undergraduate and graduate students assessed EASL courses are required to complete these courses during their first semester of enrollment at the University.

GRADUATE SCHOOL ADMISSION

Applications for admission to the University of Arkansas Graduate School and two official copies of transcripts of the applicant's academic record at each college and university attended since high school graduation must be submitted to the graduate school admissions office and approved in advance of registration. The transcripts will become a part of the student's permanent file at the University. Applications may be obtained by writing to the Graduate and International Admissions Office, 346 N. Arkansas Avenue, STON 50, 1 University of Arkansas, Fayetteville, AR 72701; by calling 479-575-6246; by e-mailing gradinfo@uark.edu; or by applying on the World Wide Web at http://apply.uark.edu.

Additional information and procedures for making application to the Graduate School are included in the Graduate School Catalog.

Admission to Graduate Standing

To be admitted to graduate standing, a student must have earned a baccalaureate degree from a regionally accredited U.S. institution or from an institution with substantially equivalent requirements for a baccalaureate degree and must have a GPA of 3.0 or better on the last 60.0 credit hours of attempted coursework prior to receiving the baccalaureate degree.

Admission to graduate standing does not admit a student to a specific program of study leading to a graduate degree. Therefore, in addition to satisfying the general requirements of the Graduate School, the applicant must also comply with the specific requirements and have the approval of the department in which graduate study is desired.

Under certain conditions, applicants for admission to the Graduate School may be required to present satisfactory scores on the Graduate Record Examinations (GRE) or another specified national standard test.

For further information, see the Graduate Catalog at http://catalogofstudies.uark.edu/2691.php.

SCHOOL OF LAW ADMISSION

A baccalaureate degree is required for admission to the University of Arkansas School of Law, except for those students in the J. William Fulbright College of Arts and Sciences or in the Dale Bumpers College of Agricultural, Food and Life Sciences who are admitted to the special six-year program. All applicants for admission are required to take the LSAT. (See page 121 for the Fulbright College Pre-Law Program or page 79 for the Dale Bumpers College of Agricultural, Food and Life Sciences.)

For complete details concerning admission to the University of Arkansas School of Law, see the School of Law Catalog or write to Office of Admissions, Leflar Law Center, University of Arkansas, Fayetteville, AR 72701; or by calling 479-575-3102. Applications can be submitted online at http://apply.uark.edu/.
Financial Aid and Scholarships

FINANCIAL AID

The University of Arkansas annually awards over $100 million of financial aid and scholarships to students. Financial aid is divided into categories of grants, work, loans, and scholarships. Students need to complete the Free Application for Federal Student Aid (FAFSA), which analyzes the ability of the student's family to pay for college; and the various scholarship applications offered through the Academic Scholarship Office, the university's colleges and departments and the Arkansas Alumni Association. These forms collect information used by the Office of Financial Aid and the University's scholarship committees in determining awards. In some cases, copies of the parents' and/or student's tax returns are needed.

DETERMINING FINANCIAL NEED

To determine financial need, a student must complete the FAFSA. Students release their information to the University of Arkansas by completing the college release section with the University of Arkansas Title IV Code of 001108.

There is a priority date of MARCH 1 for the submission of the FAFSA for the approaching school year for new students. Federally funded financial aid will be awarded on the basis of need as reflected by the FAFSA.

The Student Aid Report from the FAFSA (consisting of several pages) will be sent directly to the student by the Central Processing Service. A student needs to be enrolled or accepted for enrollment before a financial aid award may be generated.

To continue receiving financial aid, the student needs to make satisfactory progress toward a degree, as defined by the University of Arkansas, and complete the FAFSA each year. (See Satisfactory Academic Progress in next column.)

APPLICATION PROCEDURE

1. Apply for admission to the University, if not currently enrolled or admitted.
2. Complete the Free Application for Federal Student Aid (FAFSA) and submit it to the federal processor by mail or online. You may submit the FAFSA on the Web at http://www.fafsa.ed.gov/.

Students hoping to be considered for scholarships need to have their application for admission and a separate application for scholarships submitted by November 15 to the University for priority consideration. Students applying for Honors College, Bodenhamer, Sturgis and Boyer Fellowships should also submit the materials for scholarships by November 15 deadline for priority consideration, then submit the supplemental fellowship application materials by the specific fellowship application deadlines. Please check with your department for earlier deadlines and additional forms.

To receive priority consideration for financial aid, all forms and applications need to be submitted by March 1. Students are encouraged to apply even if they miss this priority date. Funds will be available after the priority date.

A student has a couple of choices concerning processing his or her FAFSA. These include mailing the form to the Federal Student Aid Programs or submitting it electronically on the Web at http://www.FAFSA.ed.gov/. The processing time for electronic applications is three days, and processing time for mailed applications is four to six weeks.

SATISFACTORY ACADEMIC PROGRESS

Federal regulation requires that a student must be making satisfactory academic progress regardless of whether he or she has previously received Title IV aid. All students enrolled at the University of Arkansas who receive financial aid through the Title IV Assistance Programs must meet satisfactory academic progress requirements as defined below to be eligible for further aid. Satisfactory academic progress is deemed to have been made by any undergraduate student who meets both the quantitative and qualitative requirements indicated below.

Quantitative Requirements

There are two quantitative requirements that the student must meet to remain eligible to apply for financial assistance. First, the student must pass, at a minimum, 67 percent of the credits attempted while attending the University. Also, the student will remain eligible to apply for aid as long as the number of credits attempted is not more than 150 percent of the number of credits required for the student's degree.

A transfer student may have earned credits at another school that will count toward his or her degree at the University of Arkansas. Class credits transferred to the University of Arkansas are used in both the 67 percent and 150 percent calculation.

The determination of each student's meeting the quantitative requirements for satisfactory academic progress will be made annually following the conclusion of the spring semester. If a student fails to pass at least 67 percent of the credits attempted or has attempted more than 150 percent of the number of credits required for graduation, then the student must appeal for reinstatement of financial aid eligibility.

Qualitative Requirements

A student is deemed to have met the qualitative requirements for satisfactory academic progress for financial aid purposes provided the student's cumulative GPA, based upon their last term of enrollment not being greater than the previous spring term, is within an acceptable range. By default, students who do not have any university or transfer credits will pass the qualitative requirement. The units of transfer credit and units attempted are combined when determining a student's qualitative GPA range used in their SAP calculation. The cumulative GPA range used is listed below:

<table>
<thead>
<tr>
<th>Total Credits (Transferred and Attempted)</th>
<th>Minimum Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-16</td>
<td>1.50</td>
</tr>
<tr>
<td>17-32</td>
<td>1.60</td>
</tr>
<tr>
<td>33-45</td>
<td>1.75</td>
</tr>
<tr>
<td>46-60</td>
<td>1.90</td>
</tr>
<tr>
<td>60 and above</td>
<td>2.00</td>
</tr>
</tbody>
</table>
Graduate and Law Students

Satisfactory academic progress for graduate and law students is determined as described above with one exception. In order to meet the quantitative requirement, the student must pass with at least a grade of “C” at a minimum, 67 percent of the credits attempted while attending the University at the graduate level.

SCHOLARSHIPS

The Academic Scholarships Office is a part of Enrollment Services and is housed in Old Main, Room 101.

The University of Arkansas, Fayetteville, awards over 3,000 scholarships totaling more than $12 million for students each year. This total does not include funds that support such external scholarships held by UA students as Governor’s Scholarships, Arkansas Academic Challenge Scholarships or non-resident tuition waivers. Scholarships funded by the University fall into three broad categories: prestigious fellowships, academic scholarships, and special interest/skills scholarships. The scholarship information contained below applies to students entering for the 2012-2013 academic year. Current high school students interested in matriculating for the 2013-2014 academic year are encouraged to consult the Academic Scholarships Office website at http://scholarships.uark.edu for the most up-to-date information.

SCHOLARSHIPS FOR NEW STUDENTS

Prestigious Fellowships (See chart below)

The University of Arkansas offers approximately 85 prestigious fellowships per year. The fellowships are given in one of four different programs: Honors College Fellowships, established in 2002; Bodenhamer Fellowships, established in 1998; Sturgis Fellowships, established in 1985; and Bodenhamer Fellowships, established in 1998; the Boyer Fellowships, established in 2000. The prestigious fellowships are among the most competitive in the nation and are awarded to the top 2 percent of students. Fellowships are awarded competitively, and each Fellow receives up to $50,000 for four years of study (or $62,500 for the five-year Bachelor of Architecture, Bachelor of Landscape Architecture and the Master of Arts in Teaching programs). Students who wish to apply should visit the website at http://honorscollege.uark.edu/.

Academic Scholarships (See chart on following page)

A number of academic scholarships also are awarded to entering freshmen. Selection criteria include national test scores (ACT or SAT), grade-point average, National Merit or National Achievement recognition, quality and quantity of courses taken, application materials, and other pertinent factors. For online information, go to http://scholarships.uark.edu/. Transfer student scholarships are awarded to students transferring from two-year colleges in Arkansas in conjunction with the Arkansas Association of Two Year Colleges’ (AATYC) Academic All-Star program. Nominations are submitted to the AATYC and recognized at their annual conference. Additional transfer student scholarships are also available. See scholarships.uark.edu.

UA Scholarships – General Information

The following regulations govern the general University freshman scholarships described below:

1. NOVEMBER 15 is the priority scholarship deadline for entering freshmen.

   Applicants must apply to the University by November 1 to be considered for these scholarships.

   

<table>
<thead>
<tr>
<th>Name</th>
<th>Annual Award</th>
<th>Eligibility Criteria</th>
<th>Application Procedure</th>
<th>Renewal Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors College Fellowship</td>
<td>$12,500 per year and out-of-state differential</td>
<td>32 ACT/1420 SAT and 3.80 GPA or higher. Strong academic curriculum and exceptional academic performance. Letters of recommendation required. Competitively awarded.</td>
<td>Requires application for admission along with the Honors College Fellowship application. Priority Deadline: November 15 (Scholarship Priority Consideration Deadline). Final Deadline: February 1.</td>
<td>Cumulative 3.00 GPA and 30 hours earned by the end of the second semester of each academic year. Renewable for 4 years or 8 semesters total. (For programs with degree plans longer than 4 years, extra semester(s) of funding may be available.)</td>
</tr>
<tr>
<td>Bodenhammer Fellowship</td>
<td>$12,500 per year and out-of-state differential</td>
<td>32 ACT/1420 SAT, 3.80 GPA or higher. Strong academic curriculum and exceptional academic performance. Demonstrated leadership. Letters of recommendation required. Competitively awarded.</td>
<td>Requires application for admission along with the Honors College Fellowship application. Priority Deadline: November 15 (Scholarship Priority Consideration Deadline). Final Deadline: February 1.</td>
<td>Cumulative 3.00 GPA and 30 hours earned by the end of the second semester of each academic year. 4 years or 8 semesters total. Renewable for 4 years or 8 semesters total. (For programs with degree plans longer than 4 years, extra semester(s) of funding may be available.)</td>
</tr>
<tr>
<td>Sturgis Fellowship</td>
<td>$12,500 per year and out-of-state differential</td>
<td>For majors in Fulbright College of Arts &amp; Sciences. 32 ACT/1420 SAT and 3.80 GPA or higher. Strong academic curriculum and exceptional academic performance. Demonstrated intellectual curiosity and creative pursuits. Letters of recommendation required. Competitively awarded.</td>
<td>Requires application for admission along with the Honors College Fellowship application. Priority Deadline: November 15 (Scholarship Priority Consideration Deadline). Final Deadline: February 1.</td>
<td>Cumulative 3.00 GPA and 30 hours earned by the end of the second semester of each academic year. Renewable for 4 years or 8 semesters total.</td>
</tr>
<tr>
<td>Boyer Fellowship</td>
<td>$12,500 per year</td>
<td>For majors in the Sam M. Walton College of Business. 32 ACT/1420 SAT and 3.75 GPA or higher OR National Merit or National Achievement semifinalist. Strong academic curriculum and exceptional academic performance. Letters of recommendation required. FAFSA demonstrated financial need required. Graduation from an Arkansas high school and Arkansas residency required. Competitively awarded.</td>
<td>Requires application for admission along with the Honors College Fellowship application (honorscollege.uark.edu). Priority Deadline: November 15 (Scholarship Priority Consideration Deadline). Final Deadline: February 1.</td>
<td>Cumulative 3.50 GPA, good standing in the honors program and 30 hours earned by the end of the second semester of each academic year. Renewable for 4 years or 8 semesters total.</td>
</tr>
<tr>
<td>Scholarship</td>
<td>Annual Award</td>
<td>Eligibility Criteria</td>
<td>Application Procedure</td>
<td>Renewal Criteria</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Chancellor's Merit Scholarship</td>
<td>Up to $10,000, plus the amount of either a Corporate Scholarship, per year toward the direct cost of education, includes out-of-state tuition differential</td>
<td>National Merit or National Achievement finalists. Exceptional academic performance. Competitively awarded</td>
<td>Apply for admission. Complete Entering Freshmen Scholarship Application</td>
<td>Cumulative 3.00 GPA and 30 hours earned by the end of the second semester of each award year. 4 years or 8 semesters total (5 years for the Bachelor of Architecture, Bachelor of Landscape Architecture, and Master of Arts in Teaching programs).</td>
</tr>
<tr>
<td>Chancellor's Scholarship</td>
<td>Up to $8,000 per year toward direct cost of education, including tuition, fees and double-occupancy room and board in UA residence hall or Greek housing.</td>
<td>Applications are competitive and typically come from the top 5 percent of the applicant pool. National Merit Semifinalists and National Achievement Semifinalists are also considered. Competitively awarded</td>
<td>Apply for admission. Complete Entering Freshmen Scholarship Application</td>
<td>Criteria same as for Chancellor's Merit Scholarship. (see above)</td>
</tr>
<tr>
<td>Chancellor's Community Scholarship</td>
<td>$5,000 per year</td>
<td>Top applicants in the applicant pool who also have a demonstrable commitment to community service.</td>
<td>Apply for admission. Complete Entering Freshmen Scholarship Application</td>
<td>Criteria same as for Chancellor's Merit Scholarship. (see above)</td>
</tr>
<tr>
<td>Honors College Academy Scholarship</td>
<td>$4,000 per year</td>
<td>Top applicants from the applicant pool with a minimum 27 ACT and 3.50 GPA. Competitively awarded.</td>
<td>Apply for admission. Complete Entering Freshmen Scholarship Application</td>
<td>Criteria same as for Chancellor's Merit Scholarship. (see above)</td>
</tr>
<tr>
<td>The New Arkansan Non-Resident Tuition Scholarship Award</td>
<td>Out-of-state tuition differential. Variable amount based on hours enrolled&lt;br&gt;The New Arkansan Fee will be assessed to new students receiving the award. See <a href="http://scholarships.uark.edu/index.php/nrta">http://scholarships.uark.edu/index.php/nrta</a> for more information.</td>
<td>Students from TX, MS, LA, KS, MO, OK or TN must have a 3.25 GPA. Entering freshmen for Fall 2012 must score 24 on the ACT (1090 SAT). Transfer students must have 24 credit hours and a 3.00 GPA.</td>
<td>Apply for admission. No scholarship application is required. Deadline: on a rolling basis until funds are exhausted</td>
<td>Renewable with completion of 24 hours per academic year, 2.75 minimum GPA. Up to 4 years (5 years for students in Architecture or the Master of Arts in Teaching program).</td>
</tr>
<tr>
<td>Freshman Academic Scholarship</td>
<td>$1,000 non-renewable</td>
<td>Students who have demonstrated outstanding academic achievement. Competitively awarded.</td>
<td>Apply for admission. Complete Entering Freshmen Scholarship Application</td>
<td>Non-renewable</td>
</tr>
<tr>
<td>University of Arkansas Leadership Award</td>
<td>$2,000 per year</td>
<td>Students who have demonstrated outstanding academic achievement and leadership potential. Competitively awarded.</td>
<td>Apply for admission. Complete Entering Freshmen Scholarship Application</td>
<td>Criteria same as for Chancellor's Merit Scholarship. (see above)</td>
</tr>
<tr>
<td>Silas Hunt Distinguished Scholarship</td>
<td>Variable awards of $5,000 or $8,000</td>
<td>Students who have demonstrated outstanding academic leadership qualities and potential and are from under-represented communities, which include but are not limited to: under-represented ethnic and minority groups; students with interest in fields of study that do not attract members of their ethnicity or gender; under-represented counties in Arkansas; or a first-generation college student. Competitively awarded.</td>
<td>Apply for admission. Complete Entering Freshmen Scholarship Application</td>
<td>Criteria same as for Chancellor's Merit Scholarship. (see above)</td>
</tr>
<tr>
<td>Arkansas Academic All Star Transfer Scholarship</td>
<td>AATYC Academic All Star receives full-tuition scholarship.</td>
<td>Strong academic performance in transfer college credit earned from an Arkansas two-year institution. Students nominated as AATYC Academic All Star by their two-year college.</td>
<td>Cumulative 3.00 GPA and 24 hours per year of eligibility.</td>
<td></td>
</tr>
<tr>
<td>Chancellor's Transfer Scholarship</td>
<td>$3,000 per year</td>
<td>Arkansas residents with strong academic performance at Arkansas two-year colleges.</td>
<td>Deadline: April 1 for fall semester and October 1 for spring semester</td>
<td>Cumulative 3.00 GPA and 24 hours per year of eligibility. Renewable for one year.</td>
</tr>
<tr>
<td>Transfer Scholarship</td>
<td>$2,000 per year. Renewable for one year.</td>
<td>Strong academic performance at another 2-year or 4-year college or university.</td>
<td>Deadline: April 1 for fall semester and October 1 for spring semester</td>
<td>Cumulative 3.00 GPA and 24 hours per year of eligibility. Renewable for one year.</td>
</tr>
</tbody>
</table>
2. An “entering freshman” is defined as a student who has not enrolled in another post-secondary institution in a fall or spring semester following graduation from high school.

3. Eligibility for renewal of Chancellor’s and general University scholarships is determined at the end of the second semester each award year. Students may “catch up” in summer terms by taking classes at their own expense on the Fayetteville campus.

4. These scholarships are generally awarded per academic year to cover the fall and spring terms, up to an eight-semester maximum for most students, or a ten-semester maximum for students in the Bachelor of Architecture, Bachelor of Landscape Architecture and the Master of Arts in Teaching programs, each of which is a five-year program. Renewal criteria are evaluated every two semesters.

5. A student who is placed on academic warning forfeits his or her scholarship effective the semester of academic warning. See http://registrar.uark.edu/424.php for a full description.

Scholarships, Grants, and Other Awards for Non-Resident Students

See page 32 in the Fees & Costs chapter.

COLLEGE AND DEPARTMENTAL SCHOLARSHIPS

The following college and departmental scholarships are available to entering freshmen at the University of Arkansas. Complete addresses and phone numbers of the colleges, schools, or departments listed below may be found in the respective college or school sections of this catalog.

Fay Jones School of Architecture

The Fay Jones School of Architecture offers a limited number of scholarships at various amounts to entering freshman in any of the degree programs offered by the School. Several scholarships are renewable annually to the recipient who maintains all the requirements of the scholarship.

Many upper level scholarships are available to continuing students. Applications are available in the fall, and recipients are selected in the spring for the following academic year. For more information and scholarship applications, please go to: http://architecture.uark.edu/126.php.

J. William Fulbright College of Arts and Sciences

The J. William Fulbright College of Arts and Sciences offers many outstanding scholarship opportunities. For comprehensive information about these awards, call 479-575-4801 or visit the Web at http://fulbright.uark.edu/students/scholarships.php.

Three college-wide scholarships merit special attention: Through the Sturgis Fellowship Program, Fulbright College offers premier scholarships worth $50,000 over four years to exceptionally talented students with the intellectual potential to become future leaders in society. In addition, all honors students are eligible to apply for research and study abroad funding through the Sturgis Grants Program. For information or an application, contact Director of Honors Studies at 479-575-2509.

The King Fahd Center for Middle East and Islamic Studies offers substantial four-year and two-year renewable scholarships to superior students majoring in Middle East Studies. The program also offers competitive funding for language study in Morocco, Tunisia, and Egypt. Funding for summer study abroad and research projects is considered on a case-by-case basis. Scholarship applications and information about the program can be obtained by contacting mes@uark.edu or calling 479-575-4157.

In honor of the Fulbright commitment to international education, the College offers the J.W. and Elizabeth W. Fulbright Endowed Scholarship, which supports a year of study abroad. To qualify, students must display an interest in one of the following fields: literature, history (including theatre, art, and music history), jurisprudence, philosophy, archaeology, comparative languages, and those aspects of the social sciences that employ philosophical or historical approaches. For more information about these opportunities, call 479-575-4801 or visit http://fulbright.uark.edu/students/scholarships.php.

Dale Bumpers College of Agricultural, Food and Life Sciences

Scholarship opportunities within Bumpers College include the Division of Agriculture Land Grant Scholars Endowment Program which offers renewable scholarships to high achieving students; The Dale Bumpers Distinguished Scholars Program which provides an annual scholarship to an outstanding transfer student, an outstanding Ph.D. graduate student, and an outstanding M.S. graduate student; and International Study Abroad scholarships for students expanding their experiences around the world.

Information and application procedures for the more than 200 Bumpers College and departmental scholarships are available at http://bumperscollege.uark.edu/39.htm or by contacting the Scholarship Management Coordinator at 479-575-2252, or via email to dbcsafs@uark.edu.

Sam M. Walton College of Business

The Boyer Fellowship is offered to Walton College students who have achieved at an outstanding level both in and out of the classroom. High grades and standardized test scores are required along with a strong academic curriculum and exceptional academic performance. Applicants for the Boyer Fellowship also must demonstrate financial need, be an Arkansas resident, and graduate from an Arkansas high school.

Other scholarships are available through the departments of accounting, information systems, economics, finance, management, marketing, and supply chain management as well as through the Walton College’s general scholarship program. Scholarships are primarily awarded on the basis of academic achievement and/or financial need.

For further information on Walton College scholarships, contact the Undergraduate Programs Office at 479-575-4622.

College of Education and Health Professions

The College of Education and Health Professions offers several hundred scholarship awards each year varying in amounts. Recipient selection is based on a variety of different attributes that are specific to each award. Attributes may include but are not limited to: academic achievement, financial need, and character.

Scholarship applications are available during the month of January each year. The application is electronic and can be found on the college’s website at http://coehp.uark.edu/scholarships.html. Applications must be submitted by January 31st. All current and future students are strongly encouraged to apply. For further information please contact Lori Foster at 479-575-4212 or llfoste@uark.edu.

College of Engineering

The College of Engineering awards numerous scholarships and fellowships beginning with the sophomore year to continuing students, transfer students, and graduate students. Most scholarships are based, primarily, on academic performance. However, scholarships are also awarded on the basis of financial need and diversity. Scholarships are available from both the college and its individual departments.

College scholarships are available to any engineering student while departmental scholarships are meant for students enrolled in a particular discipline of engineering. Students must be admitted to the University of Arkansas and accepted into the College of Engineering to qualify and receive either a college or departmental scholarship. The college has a one-step application process that allows a student to be considered for all college level scholarships and departmental scholarships.

For more information concerning scholarship and diversity opportunities, please see http://www.engr.uark.edu/home/247.php.

Music and Band

The Department of Music offers scholarships (both music scholarships and band scholarships) for talented students who sing or play instruments. All scholarships are based on musical ability, academic achievement, and potential contribution to music department ensembles. Scholarships are renewable for up to five years (ten semesters), as long as the student meets the conditions specified on the scholarship letter or contract.

Music and band scholarships are available to music majors and to students majoring in other areas who participate in certain ensembles. All scholarships require an
### SPECIAL SCHOLARSHIPS AND CONDITIONS

#### ACT 1185
Arkansas income taxpayers who earn a minimum of $5,500 in wages and, with their dependents, reside in a bordering state in a county or parish contiguous to an Arkansas county in which a public institution of higher education is located may enroll at the University of Arkansas and receive non-resident tuition award under the provisions of ACT 1185 of 1995, Section 34. The availability of funds may vary each year, and the students must provide certain documentation. Please contact the Academic Scholarships Office at 479-575-4464 for more information.

#### Arkansas Alumni Association Scholarships
The Arkansas Alumni Association, through its members and chapters, sponsor five scholarship and grant programs. See brief information in the chart below. For further information and applications, contact the Alumni Scholarship Office at 479-575-4701 or the band office at 479-575-4100.

**Air Force and Army ROTC**
The Air Force and Army Reserve Officer Training Corps programs offer a number of scholarship opportunities for entering freshmen and on-campus students. See the Reserve Officer Training Corps section of this catalog for detailed information.

### ARKANSAS ALUMNI ASSOCIATION SCHOLARSHIPS

<table>
<thead>
<tr>
<th>Name</th>
<th>Annual Award</th>
<th>Eligibility Criteria</th>
<th>Application Procedure</th>
<th>Renewal Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni Association Endowed Scholarship</td>
<td>$6,500 per year for four years</td>
<td>Incoming freshmen with a minimum GPA of 3.60 and 24 ACT or 1090 SAT</td>
<td>Request applications on the web (arkansasalumni.org), by e-mail <a href="mailto:scholarships@arkansas-alumni.org">scholarships@arkansas-alumni.org</a> or by phone 1-888-ARK-ALUM.</td>
<td>3.00 GPA and completion of 30 hours per year.</td>
</tr>
<tr>
<td>Arkansas License Plate, &quot;Roads&quot; Scholarship - Alumni Board of Directors Scholarship</td>
<td>$2,500 per year for four years</td>
<td>Applicant finalists from the Alumni Association Endowed Scholarship who are residents of Arkansas. Non-Resident finalists will receive equivalent Alumni Board of Directors Scholarship.</td>
<td>Applications from the Alumni Endowed Scholarship will be considered.</td>
<td>3.00 GPA and completion of on 30 hours per year.</td>
</tr>
<tr>
<td>Razorback Generations Scholarship</td>
<td>$2,500 per year for four years</td>
<td>Arkansas finalists from the Alumni Association Endowed Scholarship with a family connection to the University of Arkansas, Fayetteville.</td>
<td>Applications from the Alumni Endowed Scholarship will be considered.</td>
<td>3.00 GPA and completion of on 30 hours per year.</td>
</tr>
<tr>
<td>Alumni Chapter Scholarships</td>
<td>Variable amount based on chapter funds</td>
<td>Minimum GPA of 3.50 and 24 ACT</td>
<td>Applications from the Alumni Endowed Scholarship will be considered.</td>
<td>Varies from chapter to chapter</td>
</tr>
<tr>
<td>Alumni Legacy Scholarship</td>
<td>Out-of-state tuition differential. Variable amount based on hours enrolled. $560 program fee per fall and spring semesters will be assessed for undergraduate non-residents receiving this award.</td>
<td>Non-resident students admitted as degree-seeking students with a 3.0 GPA and 20 ACT/930 SAT. Must have a parent, grandparent, aunt, uncle, sibling or spouse who graduated from the UofA and is an Arkansas Alumni Association member.</td>
<td>Complete a Legacy Scholarship Application on the Web (arkansasalumni.org) or contact the alumni scholarship office (1-888-ARK-ALUM).</td>
<td>Renewable for up to 8 semesters with the completion of 24 hours and a cumulative 2.75 GPA per year.</td>
</tr>
<tr>
<td>Membership Funded Scholarship</td>
<td>Need-based scholarships of variable amounts</td>
<td>Minimum high school GPA or 3.60 and 24 ACT or 1090 SAT. Applicants must have a FAFSA on file with the University of Arkansas. Preference is given to students whose EFC is less than $6,500 per year.</td>
<td>Applications from the Alumni Endowed Scholarship will be considered.</td>
<td>Recipients must reapply for renewal consideration.</td>
</tr>
</tbody>
</table>

#### Military Benefits
The University of Arkansas is approved by the Arkansas Department of Higher Education and the Federal Department of Veterans’ Affairs to participate in benefit programs for veterans and their dependents who are working toward a degree. Veterans of recent military service, service members, members of reserve units, and the dependents of certain other service members may be entitled to educational assistance payments under the following programs: Title 38, Chapter 30, Montgomery GI Bill for Active Duty; Title 38, Chapter 31, Vocational Rehabilitation and Employment Program; Title 38, Chapter 32, Post-Vietnam Era Veterans’ Educational Assistance; Title 38, Chapter 33, Post-9/11 GI Bill; Title 38, Chapter 35, Survivors and Dependents Educational Assistance Program; Title 10, Chapter 1606, Montgomery GI Bill for Selective Reserves; Title 10, Chapter 1607, Reserve Educational Assistance Program (REAP); and Federal Veterans’ Affairs Work Study Allowance Program.

Students must be working toward a degree and following the curriculum outline for their objectives, since only specific courses may be applied toward VA certification and graduation. Students inquiring about educational benefit eligibility should contact the university’s Veterans Resources and Information Center at 479-575-8742 for further information.

Additionally, the University of Arkansas offers 20 one-year scholarships in the amount of $3,000 to support current and former members of the United States military services and their eligible dependents. Students should contact the Academic Scholarship Office at 479-575-4464 for further information.
Orientation and Registration

ORIENTATION

All new undergraduate students are expected to participate in an orientation experience. The orientation program is designed to introduce every aspect of the university community to our students, enabling them to establish a bond with the institution and those here to support them. A significant aspect of this experience will be to provide students with information about the learning opportunities, resources, policies, support systems, and student activities at the University. New freshmen must attend orientation before enrolling in classes. For more information on New Student Orientation, go to http://orientation.uark.edu/.

REGISTRATION

Undergraduate students, including students not declaring a major, must enroll in one of six academic units: the J. William Fulbright College of Arts and Sciences; the Dale Bumpers College of Agricultural, Food and Life Sciences, the Sam M. Walton College of Business, the College of Education and Health Professions, the College of Engineering, or the Fay Jones School of Architecture. Information regarding registration periods and procedures is found on the Web site of the Office of the Registrar at http://registrar.uark.edu/.

Registration Periods

Students must register during one of the formal registration periods. Currently enrolled students are expected to register during the priority registration held each semester. New freshmen are expected to register during orientation. New freshmen not already registered during orientation should register during the open registration period that immediately precedes the beginning of classes each semester. New transfer students should contact their academic college for advising and registration information. There is a late registration period of five days at the beginning of fall and spring semesters and a one- or two-day late registration period at the beginning of the summer sessions, but students may find that many classes are filled.

Student Addresses

It is the responsibility of all students to maintain and correct their addresses with the University and to report any change of address promptly either in writing to the Office of the Registrar or on the Student Information System at http://isis.uark.edu/. Failure to do so may result in undelivered official correspondence and announcements. Emergency contact information is also required. Important academic announcements are frequently sent to the students through University assigned e-mail accounts. Students must check this account frequently to avoid missing critical notices.

Identification Cards

Identification cards are made at orientation and at the ID Card Office during the fall and spring semesters, but students may find that many classes are filled. Identification cards are made at orientation and at the ID Card Office during the fall and spring semesters, but students may find that many classes are filled. Several privileges on campus require an ID card, and it can be used as a debit card for purchases at various locations throughout the campus. Part-time students are also eligible for a card.

Academic Advising

Academic advising is an active, ongoing exchange between the advisers and students, grounded in teaching and learning. Advising is based on students gaining accurate and appropriate information and direction to help make their educational experience relevant, coherent, and meaningful. It is a process that assists students in connecting with the University of Arkansas, making thoughtful decisions related to their academic experiences, and maximizing their educational and career opportunities. Quality academic advising is essential to achieving the University's vision. (Academic Advising Council Mission Statement, 2010)

While procedures may vary among schools and colleges, all successful academic advising should include the following:

- A mutual respect between adviser and student with the student possessing final responsibility for successful completion of a degree.
- A developmental and educational process that occurs over time.
- Consideration of individual students’ interests, abilities, and needs.
- A collaborative effort to connect students to campus resources and services.
- Reasonable availability and accessibility to advisers.
- Interpretation of University of Arkansas, college, and departmental rules and courses.
- A student's understanding of the purpose and nature of the university core courses.
- Recommendation of appropriate courses.
- A student's understanding of and progress toward academic requirements.
- General information regarding career options and opportunities, with appropriate referrals as necessary.
- Respect for students’ ethnic and racial heritage, age, gender, culture, national origin, sexual orientation, and religion, as well as their physical, learning, and psychological abilities.
- An understanding of and adherence to laws and regulations that relate to academic advising.
- Adherence to the highest principles of ethical behavior.

The University is committed to developing each student to his or her fullest potential. To this end, programs in each college have been established to improve the academic achievement and persistence of students on academic warning and of other students in need of academic assistance. Such assistance is provided through a variety of instructional and informational services.

Arkansas State Requirements for Developmental Course Placement

Arkansas law specifies that all first-time entering freshmen enrolled in a bachelor’s degree program will be placed in either college-level credit courses in English and mathematics or remedial courses in English composition, reading, and mathematics on the basis of their scores on specified tests.
Orientation and Registration

- Students who score below 19 on the English section of the ACT or below 470 on the verbal score of the SAT must enroll in ENGL 0002 Basic Writing, which does not carry degree credit.
- Students who score below 19 on the reading section of the ACT or below 470 on the verbal score of the SAT must enroll in ENGL 0013 Reading Strategies for College Students, which does not carry degree credit.
- Students who score below 19 on the mathematics section of the ACT or below 460 on the quantitative portion of the SAT must enroll in MATH 0003 Beginning and Intermediate Algebra, which does not carry degree credit. (The Mathematical Sciences Department requires higher ACT/SAT scores for students to be placed in Math courses above MATH 0003. Please see the Course Descriptions for MATH for details.)
- Students may place out of assigned remedial courses with appropriate scores on the relevant subject placement tests offered through the University.
- Before registering for courses during their first term at the University and, if necessary, in subsequent terms until passing grades have been earned in all required courses. Students must successfully complete any required developmental course in English before enrolling in freshman composition. Students must successfully complete any required developmental course in mathematics before enrolling in a college-level mathematics course. Students who need further information or clarification regarding this law are encouraged to discuss this with their academic adviser or dean.

Courses That Do Not Count toward a Degree

The following courses do not count toward degree credit in any college or school ENGL 0002, ENGL 0013, and MATH 0003.

The following courses do not count toward any degree in the College of Engineering: MATH 1203 College Algebra, MATH 1213 Plane Trigonometry, MATH 1284C Pre-calculus Mathematics, and ENGL 2003 Advanced Composition.

Registration for Grades of Pass-Fail

Students in some programs may register to take certain courses on a pass-fail basis. In such cases, a mark of “CR” (passed) or a grade of “F” (failed) will be recorded.

Students in the J. William Fulbright College of Arts and Sciences, the Fay Jones School of Architecture, and the Dale Bumpers College of Agricultural, Food and Life Sciences are eligible to enroll for certain courses on a pass-fail basis under the following conditions:
1. That such registration is approved by the student’s adviser. (Students in Agricultural, Food and Life Sciences must also have the approval of their academic dean.)
2. That the student has attained sophomore rank or higher.
3. That the student is not on academic warning and has achieved a cumulative grade-point average of at least 2.00.
4. That such enrollment is limited to one course per semester.
5. That the total enrollment on a pass-fail basis be limited to no more than 18 hours in any student’s degree program.
6. That the courses involved are not part of the student’s major and are not specifically required as part of the student’s degree program.
7. Normally, registration for pass-fail credit will be completed prior to the final date for changing registration by adding a course.

Grades for students enrolled on a pass-fail basis will be reported on final grade rosters in the usual manner. The dean’s office will review each report and will authorize the registrar to record “CR” or “F” on the student’s official academic record, as appropriate. The “CR” marks will not be counted in grade point averages but will increment hours earned; the “F” grade will be counted in the grade point average.

Students in the College of Education and Health Professions may enroll in courses on a pass-fail basis under the same conditions but only in courses offered by the Fulbright College of Arts and Sciences and the College of Education and Health Professions. Walton College of Business and College of Engineering students may not take courses on a pass-fail basis.

Undeclared Major

Degree-seeking students who are undecided about their choice of a major field of study will be considered to have an undeclared major. However, all undergraduate students must enroll in one of the colleges or schools. Each of these academic units makes provisions for undeclared majors, and each has its own rules concerning the point at which a student must declare a major. Again, academic advisers will be of great assistance in determining the college or school in which a student with an undeclared major should enroll.

Walton College of Business students have the pre-business classification with an intended major until they complete specific lower-division courses, a process that normally takes four semesters. All engineering students are classified as pre-engineering students until they have satisfied the pre-professional program, which is normally completed during the freshman year.

Registration for Audit

Students wishing to audit a class should contact the instructor teaching that class and request permission to audit. If the instructor approves the audit, the academic department will register the student in that class as an audit. Auditing of a class is allowed on a space-available basis, and a student must pay fees for that class. The instructor shall notify the student of the requirements for receiving the mark of “AU” for the course being audited. The instructor and the student’s dean may drop a student from a course being audited if the student is not satisfying the requirements specified by the instructor. The student is to be notified if this action is taken. The only grade or mark that may be awarded is “AU.”

Adding and Dropping Courses

A currently enrolled student who has registered during the advance registration period should make any necessary or desired schedule adjustments such as adding or dropping courses or changing course sections during the schedule-adjustment period of the same semester. Students may also add or drop courses during the first five class days of a fall or spring semester. Students who drop classes by the fifth day of classes in the fall and spring semesters will have their fees adjusted. (Refer to the Office of the Treasurer’s Web site at http://treasurer.uark.edu/Drop_Add_Class.asp for summer dates and other sessions). Fee adjustments are not done for classes dropped after the first week of class. Drops and withdrawals are two different functions. In a drop process, the student remains enrolled. The result of the withdrawal process is that the student is no longer enrolled for the term. The two functions have different fee adjustment policies. Fee adjustment deadlines for official withdrawal are noted on the Treasurer’s Web site.

A student may drop a full-semester course during the first 10 class days of a fall or spring semester without having the drop shown on the official academic record. After the first 10 class days, and before the drop deadline of the semester, a student may drop a course, but a mark of “WC” indicating the drop, will be recorded. A student may not drop a full-semester course after the Friday of the thirteenth week of classes in a fall or spring semester. Drop-add deadlines for partial semester courses and summer classes are listed on the semester calendars located on the Office of the Registrar’s Web site at http://registrar.uark.edu.

Withdrawal from Registration

Withdrawal from the University means withdrawing from all classes that have not been completed up to that time. A student who leaves the University voluntarily before the end of the fall or spring semester must withdraw from all classes on the student registration system or notify the Office of the Registrar in writing. Withdrawal may occur anytime during the semester through the last day of classes. Withdrawal deadlines for summer sessions are listed on the semester calendars located on the Office of the Registrar’s Web site, http://registrar.uark.edu. Students who do not withdraw officially from a class they fail to complete will receive an “F” in that class. Students with holds on their registration should contact the Office of the Registrar for assistance in processing their official withdrawal from the University.

The deadline for a full fee adjustment for an official withdrawal is the day before the start of classes for that term. After that date a $45.00 withdrawal fee will be charged, and a percentage of the fees will be refunded. Refer to the Office of the Treasurer’s Web site for the deadlines and percentages.
Course Loads

While University offices and services typically recognize the full-time status of students who have enrolled for a minimum of 12 semester hours, students should bear in mind that this minimum number of hours is insufficient to allow them to complete a four-year degree program in eight academic semesters (four years). Since most University degree programs require a minimum of 124 semester hours, or 31 hours per year, a student should earn 15 to 16 hours per semester to complete most degree programs in four years (eight semesters). The University offers degree-completion plans; see the Office of the Registrar’s Web site at http://registrar.uark.edu or the Academic Regulations section of this catalog.

Number of Hours Allowed per Semester

The number of hours in which a student is allowed to register includes Independent Study courses taken through Global Campus.

1. Students who wish to carry more than 18 hours per semester must first obtain the permission of their academic deans.
2. Students who wish to carry more than 21 hours per semester must first request and receive favorable action from the Academic Standards Committee.
3. Students on academic warning may not carry more than 12 hours per semester unless approved by their academic dean’s office or advising center.
4. Students on academic suspension who choose the limited enrollment option may not carry more than 9 hours for that semester unless permission has been requested and granted by the Academic Standards Committee.
5. Students who wish to exceed the normal summer school load must have the approval of their academic deans to take more than seven hours in five- or six-week sessions or 13 to 14 hours in 10- or 12-week sessions. Students who wish to take more than eight hours in one five- or six-week session or more than 14 hours in one 10- or 12-week session must first receive favorable action from the Academic Standards Committee.
6. For students with severe injury or illness of a temporary or permanent nature, less than 12 hours may be certified on a semester-by-semester basis as full-time with the approval of the student’s dean and the concurrence of a physician or licensed examiner.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Course Hours Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>&lt; 30</td>
</tr>
<tr>
<td>Sophomore</td>
<td>≥ 30 but &lt;60</td>
</tr>
<tr>
<td>Junior</td>
<td>≥ 60 but &lt;90</td>
</tr>
<tr>
<td>Senior</td>
<td>≥ 90</td>
</tr>
</tbody>
</table>
Fee and Cost Estimates

Educational expenses will vary according to a student’s course of study, personal needs, and place of residence. All fees, charges, and costs quoted in this catalog are subject to change without notice. A survey tool for tuition and fee estimation is available at http://treasurer.uark.edu/Tuition.asp?pagestate=Estimate.

Financial obligations to the University must be satisfied by the established deadlines. Payment may be made at the University Cashier’s Office in the Arkansas Union, Room 214, by cash, personal check, money order or certified check. Echeck (electronic check) and credit/debit payments are made online at https://isis.uark.edu/. If you pay with a debit or credit card, there is a convenience fee charged of 1.7 percent.

Acceptance of payment for fees does not imply academic acceptance to the University.

ESTIMATED NECESSARY EXPENSES FOR AN ACADEMIC YEAR

Estimates of necessary expenses for the 2012-13 academic year for a typical undergraduate student taking 30 credit hours per academic year at the University of Arkansas:

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate Resident</th>
<th>Undergraduate Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition1</td>
<td>$6,142.00</td>
<td>$17,022.00</td>
</tr>
<tr>
<td>University Fees2</td>
<td>1,412.00</td>
<td>1,412.00</td>
</tr>
<tr>
<td>Books</td>
<td>1,278.00</td>
<td>1,278.00</td>
</tr>
<tr>
<td>Personal Expenses</td>
<td>2,188.00</td>
<td>2,188.00</td>
</tr>
<tr>
<td>Transportation</td>
<td>1,780.00</td>
<td>1,780.00</td>
</tr>
<tr>
<td>Room3</td>
<td>5,494.00</td>
<td>5,494.00</td>
</tr>
<tr>
<td>Board4</td>
<td>3,178.00</td>
<td>3,178.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$21,472.00</td>
<td>$32,352.00</td>
</tr>
</tbody>
</table>

1. The standard undergraduate in-state tuition rate is $204.70 per credit hour. Students enrolled in College of Business courses are charged $239.50 per credit hour in-state tuition. School of Architecture students are charged $220.05 per credit hour in-state tuition. Nursing students are charged $241.98 per credit hour in-state tuition.

2. University fees per year include the following student-initiated and student-approved fees:
   - Student Activity fee calculated at $2.64/credit hour 79.20
   - Student Health fee, calculated at $7.25/credit hour 217.50
   - Media fee, calculated at $0.69/credit hour 20.70
   - Transit fee, calculated at $2.53/credit hour 75.90
   - Network Infrastructure and Data Systems fee ($11.97/credit hour) 359.10
   - Facilities Fee, calculated at $10.00/credit hour 300.00
   - College of Arts and Sciences Fee ($12.00/credit hour) 360.00

3. Weighted average expenses for living in a residence hall, double occupancy, with an unlimited meal plan. Actual room and board fees vary from $7,702.00 to $10,018.00 per academic year.

4. Budget amounts were adjusted for rounding to accommodate ISIS budgetary rules.

When paying tuition, room and board, and associated fees, anticipated financial aid for a current semester may be deducted when it is listed as anticipated aid on ISIS.

Students receiving financial aid are strongly encouraged to have sufficient personal funds available to purchase books and to meet necessary expenses for at least one month at the start of school as some aid funds may not be available for disbursement.

The latest information regarding costs and other aspects of University life may be obtained by calling or writing the Office of Admissions, 200 Hunt Hall, University of Arkansas, Fayetteville, AR 72701. In Arkansas call 1-800-377-8632; from outside of Arkansas call (479) 575-5346.

TUITION FEES

Students classified as “in-state” for fee payment purposes are assessed tuition. Students classified as “out-of-state” for fee payment purposes are assessed additional non-resident tuition.

Official policies of the University of Arkansas Board of Trustees provide the basis for classifying students as either “in-state” or “out-of-state” for purposes of paying student fees. Board policies relating to residency status for fee payment purposes are included at the end of this chapter of the catalog. Out-of-state students who question their residency classification are encouraged to contact the Registrar's Office, 146 Silas H. Hunt Hall, for more information about residency classification review procedures. The New Arkansan Non-Resident Tuition Scholarship Award Program Fee will be assessed for undergraduate non-residents (including transfer students) and international students who enter in the fall 2011 and who are receiving the Non-Resident Tuition Award. The fee will be $560.00 per semester (fall and spring only) as long as students are receiving the award.

Academic Year

Undergraduate students are assessed tuition of $204.70 per credit hour. Students with out-of-state residency status are assessed tuition of $567.41 per credit hour.

Undergraduate students enrolled in developmental instruction courses are charged tuition of $122.50 per credit hour in-state and $485.21 per credit hour for out-of-state students.

Undergraduate students enrolled in the Walton College of Business courses are charged tuition of $239.50 per credit hour in-state and $663.87 per credit hour for out-of-state students.

Undergraduate students enrolled in the Fay Jones School of Architecture are charged tuition of $220.05 per credit hour in-state and $609.97 per credit hour for out-of-state students.

Undergraduate nursing students are assessed tuition of $241.98 per credit hour. Students with out-of-state residency status are assessed tuition of $670.74 per credit hour.

Summer Sessions

Undergraduate students are assessed tuition of $204.70 per credit hour in-state and $567.41 per credit hour for out-of-state.

Undergraduate students enrolled in the Walton College of Business courses are charged tuition of $239.50 per credit hour in-state and $663.87 per credit hour for out-of-state students.
Undergraduate students enrolled in the Fay Jones School of Architecture are charged tuition of $220.05 per credit hour in-state and $609.97 per credit hour for out-of-state students.

Undergraduate students enrolled in developmental instruction courses are charged tuition of $122.50 per credit hour in-state and $485.21 per credit hour for out-of-state students.

Undergraduate nursing students are assessed tuition of $241.98 per credit hour. Students with out-of-state residency status are assessed tuition of $670.74 per credit hour.

**FEE ADJUSTMENTS**

**Academic Semesters and Summer Sessions**

Students who officially withdraw (dropping ALL classes that have not been completed up to that time) from the University of Arkansas during the regular fall or spring semesters receive a cancellation of fees (see chart below), less an Administrative Withdrawal fee of $45. Students who officially withdraw from a summer session or who drop classes in the summer also receive a cancellation of fees (see chart below).

<table>
<thead>
<tr>
<th>Adjustment Percentage</th>
<th>If withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>before the first day of the semester/session</td>
</tr>
<tr>
<td>90%</td>
<td>through the first 10% of days in the semester/session</td>
</tr>
<tr>
<td>80%</td>
<td>through the second 10% of days in the semester/session</td>
</tr>
<tr>
<td>70%</td>
<td>through the third 10% of days in the semester/session</td>
</tr>
<tr>
<td>60%</td>
<td>through the fourth 10% of days in the semester/session</td>
</tr>
<tr>
<td>50%</td>
<td>through the fifth 10% of days in the semester/session</td>
</tr>
<tr>
<td>40%</td>
<td>through the sixth 10% of days in the semester/session</td>
</tr>
</tbody>
</table>

**Student Invoices**

Students who pre-register for a semester will be invoiced approximately three weeks prior to the first day of classes. The Treasurer’s Office will send out an email notification when the student invoices are available on ISIS. Students should log into ISIS at http://isis.uark.edu, navigate to the Finances section of the Student Center, and click the ‘Student Invoices’ link located under the My Account section.

**Late Fees**

Students who register for the fall 2012 and spring 2013 semesters are required to pay all charges by the posted payment deadline. Students who fail to pay all charges or who fail to execute an installment payment plan by the deadline may be assessed a late payment fee equal to the outstanding balance, not to exceed $50.00.

Any student with an outstanding balance, to include registration-related fees and/or housing charges, by the last payment deadline will be assessed an additional late payment fee equal to the outstanding balance, not to exceed $50.00.

The late fee will not be waived because an invoice was not received.

**Disbursement of Refunds**

Disbursement of refunds due to overpayments by scholarships, loans, and/or grants will begin approximately five (5) days prior to the start of classes. Checks will be mailed to the student’s permanent address unless a check address has been established on ISIS. Students may also receive a refund through direct deposit. Sign up for direct deposit through the Student Center on ISIS. The link is located beneath “account inquiry” on the left side of the screen.

**Addresses**

Students may create a check address, which will be used specifically for overpayment checks. This address may be created in addition to the local and permanent addresses. If a check address is not created, the default address will be the permanent address. The student may change their address on the ISIS Web site in the Student Center.

**STUDENTS CALLED INTO ACTIVE MILITARY SERVICE**

When a student or student's spouse is activated for full-time military service during a time of national crisis and is required to cease attending the University of Arkansas without completing and receiving a grade in one (1) or more courses, they shall receive compensation for the resulting monetary loss as provided by Fayetteville Policy 504.2.

To be eligible for the compensation, the student must provide, prior to activation or deployment for military service, an original or official copy of the military activation or deployment orders to the Registrar. A student whose spouse is a service member shall provide proof of registration with the Defense Enrollment Eligibility Reporting System (DEERS) of the Department of the Defense that establishes that dependent children reside in the household of the student and the service member. Upon leaving the University of Arkansas because of active duty or deployment, the student may

<table>
<thead>
<tr>
<th>FEES*</th>
<th>Title</th>
<th>Description</th>
<th>Amount**</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITIES FEE</td>
<td>Provides support dedicated specifically to campus facilities needs, including major projects and deferred maintenance.</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>MEDIA FEE</td>
<td>The University’s student publications, specifically the Arkansas Traveler newspaper and the Razorback yearbook, are partially funded by the media fee. Students reserving a copy are provided with a Razorback yearbook.</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>NETWORK INFRASTRUCTURE AND DATA SYSTEMS FEE</td>
<td>Provides support for the development and operation of the campus network, including electronic equipment, servers with software, and cabling. The network systems serve computer labs, academic and administrative buildings, residence halls and off-campus access facilities. Data systems will enable Web-based access to the University’s information systems for students, faculty, and staff. Also provides support for upgrades and replacement of the student information system.</td>
<td>11.97</td>
<td></td>
</tr>
<tr>
<td>STUDENT ACTIVITY FEE</td>
<td>Empowers the Associated Student Government (ASG) to make funding available to over 300 Registered Student Organizations and program activities on campus to develop lasting friendships and leadership abilities and provide all students with a unique opportunity to participate in cultural, social, educational, and recreational events throughout the year.</td>
<td>2.64</td>
<td></td>
</tr>
<tr>
<td>STUDENT HEALTH FEE</td>
<td>Covers the cost of office visits by physicians, registered nurses, and other health professionals, medical evaluations, women’s health visits, and counseling and psychological service visits. Other services covered by the health fee include health promotion and education and 24-hour emergency care for counseling and psychological needs.</td>
<td>7.25</td>
<td></td>
</tr>
<tr>
<td>TRANSIT FEE</td>
<td>Helps fund the Razorback Bus Transit System, which services the campus and neighboring community year round.</td>
<td>2.53</td>
<td></td>
</tr>
</tbody>
</table>

* Assessed each academic semester for which the student is enrolled: fall, spring, and summer
**per credit hour
choose one of three compensatory options. The student may officially withdraw and receive full adjustment and refund of tuition and non-consumable fees for the term involved; the student can remain enrolled and arrange for a mark of “Incomplete” for each class and finish the courses twelve (12) months after deactivation; or the student may receive free tuition and fees for one (1) semester after deactivation. For more detailed information, refer to Fayetteville Policy 504.2

WAIVER OF TUITION AND FEES FOR SENIOR CITIZENS

Arkansas residents who are 60 years of age or older and show proper proof of age may choose to have tuition and fees waived under the senior citizen waiver of fees. Admission and enrollment under these conditions is open only on a “space available” basis in existing classes and students choosing to use this waiver may not register until just prior to the beginning of the term.

ROOM AND BOARD

University Housing
(Rates are subject to change)

Single freshmen under 21 years of age are required to live in University residence halls, fraternity or sorority houses, or with their parents, unless permission to live off-campus has been obtained through University Housing. Permission to reside off-campus is granted on a semester basis and must be obtained prior to enrolling or prior to the semester in which off-campus residency is desired.

Costs of room and board in University residence halls during the 2012-13 academic year range from $7,702.00 to $10,018.00 for double occupancy rooms and with an unlimited meal plan. Single rooms are additional and are available on a first-come, first-serve basis.

Housing for married students, students with family status, nontraditional, graduate, and law students is limited and requires early application.

Summer rates for room in University residence halls during summer sessions are $32.69 per day for a single. Charges start on the requested move-in day and run through the date of check-out.

Specific questions concerning on-campus living or meal plans may be directed to University Housing (479) 575-3951. Specific questions concerning sorority and fraternity housing may be directed to the Office of Greek Affairs (479) 575-5001.

Off-Campus Housing

Students eligible to live off-campus may contact local real estate offices for rental information or check http://offcampushousing.uark.edu/.

OTHER GENERAL FEE INFORMATION

Checks tendered to the University are deposited immediately. The University does not accept postdated checks. Checks returned for “insufficient funds” (NSF checks) are generally presented for payment only once. Each check returned by a bank for any reason will be assessed a returned check fee. The University may, at its discretion, verify available bank funds for any checks written for payment of indebtedness before accepting a check.

The University of Arkansas reserves the right to withhold transcripts or priority registration privileges, to refuse registration, and to withhold diplomas for students or former students who have not fulfilled their financial obligations to the University. These services may also be denied students or former students who fail to comply with the rules governing the audit of student organization accounts or to return property entrusted to them.

Requests for exceptions to University’s fees, charges, and refund policies must be made in writing. Instructions for submitting requests for exceptions to the various fees, charges, and refund policies of the University may be obtained as follows:

For residence life and dining services fees, charges, and refund policies contact University Housing, Attention: Assistant Director for Business, Hotz Hall, 9th floor, (479) 575-3951.

<table>
<thead>
<tr>
<th>PROGRAM/SERVICE SPECIFIC FEES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arkansas Non-Resident Tuition Scholarship Award</strong></td>
<td>$560.00/semester</td>
</tr>
<tr>
<td>Program Fee (charged to all students receiving the Non-Resident Tuition Award)</td>
<td></td>
</tr>
<tr>
<td><strong>Autism Support Program Fee</strong></td>
<td>$5,000.00/semester</td>
</tr>
<tr>
<td><strong>English Language Placement Test (ELPT)</strong></td>
<td>$15.00</td>
</tr>
<tr>
<td><strong>CLEP Registration Fee</strong></td>
<td>25.00</td>
</tr>
<tr>
<td><strong>Compass Fee</strong></td>
<td>30.00</td>
</tr>
<tr>
<td><strong>Graduation fees:</strong></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>45.00</td>
</tr>
<tr>
<td>Baccalaureate Degree</td>
<td>75.00</td>
</tr>
<tr>
<td><strong>I.D. Card</strong></td>
<td></td>
</tr>
<tr>
<td>First card</td>
<td>22.00</td>
</tr>
<tr>
<td>Each replacement card</td>
<td>18.00</td>
</tr>
<tr>
<td><strong>Jean Tyson Child Development Study Center</strong></td>
<td></td>
</tr>
<tr>
<td>Materials per semester</td>
<td>35.00</td>
</tr>
<tr>
<td>Infants/Toddlers/Pre-School per week</td>
<td>250.00</td>
</tr>
<tr>
<td><strong>Installment Payment Plan</strong></td>
<td>25.00</td>
</tr>
<tr>
<td><strong>International student (non-immigrant) application fee</strong></td>
<td>50.00</td>
</tr>
<tr>
<td><strong>International student per semester service fee (non-immigrants)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sponsored Student Management Fee</strong></td>
<td>300.00</td>
</tr>
<tr>
<td><strong>International Visiting Student Program Fee</strong></td>
<td>250.00</td>
</tr>
<tr>
<td><strong>Late payment:</strong></td>
<td></td>
</tr>
<tr>
<td>On fifth day of classes if balance has not been paid</td>
<td>50.00</td>
</tr>
<tr>
<td>Additional fee at Nov. 30, April 30, and July 31 for fall, spring, and summer, respectively, if payment has not been made</td>
<td>50.00</td>
</tr>
<tr>
<td><strong>Mandatory international student health insurance</strong></td>
<td>1,334.00/year</td>
</tr>
<tr>
<td><strong>New student orientation fees:</strong></td>
<td></td>
</tr>
<tr>
<td>First Year Experience (New Admits Only)</td>
<td>55.00</td>
</tr>
<tr>
<td>Students (New Admits Only)</td>
<td>85.00</td>
</tr>
<tr>
<td>Parents</td>
<td>50.00</td>
</tr>
<tr>
<td><strong>Nursing Application Fee</strong></td>
<td>45.00</td>
</tr>
<tr>
<td><strong>Parking Permit (per vehicle)</strong></td>
<td></td>
</tr>
<tr>
<td>Remote</td>
<td>54.78</td>
</tr>
<tr>
<td>Student</td>
<td>81.45</td>
</tr>
<tr>
<td>Resident Reserved</td>
<td>528.04</td>
</tr>
<tr>
<td>Parking Garage Reserved</td>
<td>719.76</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>54.78</td>
</tr>
<tr>
<td>Scooter</td>
<td>7.42</td>
</tr>
<tr>
<td><strong>Residence Hall nonrefundable application fee</strong></td>
<td>35.00</td>
</tr>
<tr>
<td><strong>Residual ACT</strong></td>
<td>50.00</td>
</tr>
<tr>
<td><strong>Spoken Language Placement Test (SLPT)</strong></td>
<td>65.00</td>
</tr>
<tr>
<td><strong>Study Abroad Service fee</strong></td>
<td></td>
</tr>
<tr>
<td>Per program, fall and spring</td>
<td>200.00</td>
</tr>
<tr>
<td>Per program, summer</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Test Handling Fee</strong></td>
<td>15.00</td>
</tr>
<tr>
<td><strong>TOEFL</strong></td>
<td>60.00</td>
</tr>
<tr>
<td><strong>Transcript Fee - Official Copy</strong></td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Miller Analogies Test (MAT)</strong></td>
<td>70.00</td>
</tr>
<tr>
<td><strong>Undergraduate application for admission</strong></td>
<td></td>
</tr>
<tr>
<td>Additional late application fee</td>
<td>40.00</td>
</tr>
<tr>
<td><strong>Withdrawal from the University fee</strong></td>
<td>45.00</td>
</tr>
<tr>
<td>College/Course Specific Fees</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>College of Agricultural, Food and Life Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>Agricultural and Extension Education Fee AGED 3141L</td>
<td>$10.00/semester</td>
</tr>
<tr>
<td>Agricultural and Extension Education Fee AGME 2123</td>
<td>$7.00/credit hour</td>
</tr>
<tr>
<td>Agricultural and Extension Education Fee AGME 4973</td>
<td>$3.00/credit hour</td>
</tr>
<tr>
<td>Apparel Studies Laboratory Fees HESC 1023, 1053, 2053, 3003, 4063, 4033</td>
<td>$15.00/credit hour</td>
</tr>
<tr>
<td>Equine Behavior &amp; Training ANSC 2304</td>
<td>$25.00/credit hour</td>
</tr>
<tr>
<td>Fifth-year Internship Fee (M.A.T.) AGED 575V</td>
<td>$100.00/semester</td>
</tr>
<tr>
<td>Horticulture Laboratory Fee HORT 3113</td>
<td>3.50/credit hour</td>
</tr>
<tr>
<td>Jean Tyson Child Development Study Center Fee HESC 2402 and 2401L, HESC 3402 and 3401L</td>
<td>$15.00/credit hour</td>
</tr>
<tr>
<td>M.A.T. Fifth-year Internship Fee AGED 575V</td>
<td>$100.00/semester</td>
</tr>
<tr>
<td>School of Human Environmental Sciences Fees HESC 1411L, 2111L, 2403, 2433, 3401L, 4103, 4332, 4332L, 4342, 4472, 4472L</td>
<td>$15.00/credit hour</td>
</tr>
<tr>
<td>Teaching Internship Fee AGED 475V</td>
<td>$100.00/semester</td>
</tr>
</tbody>
</table>

## School of Architecture

<table>
<thead>
<tr>
<th>School of Architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Design Fee IDES 1034, 1044, 2805, 2815, 3805, 3815, 4805, 4815</td>
</tr>
<tr>
<td>Interior Design Travel Fee</td>
</tr>
<tr>
<td>International Study Fee (Architecture and Landscape Architecture Academic Plans)</td>
</tr>
</tbody>
</table>

## College of Arts and Sciences

<table>
<thead>
<tr>
<th>College of Arts and Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifth-year Internship Fee (M.A.T.) ARED 476V, MUED 451V</td>
</tr>
<tr>
<td>International Study Fee for European Studies &amp; International Relations (due initial semester of enrollment, paid in semester installments)</td>
</tr>
</tbody>
</table>

## College of Business

<table>
<thead>
<tr>
<th>College of Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Competency WCOB 1120</td>
</tr>
</tbody>
</table>

## College of Education and Health Professions

<table>
<thead>
<tr>
<th>College of Education and Health Professions</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSE Fourth-year Student Teaching Fee (CIED 4173, CATE 406V, PHED 407V)</td>
</tr>
<tr>
<td>Counseling Practicum Fee CNED 5343, CNED 6711</td>
</tr>
<tr>
<td>Counseling Internship Fee CNED 574V CNED 674V section 1</td>
</tr>
<tr>
<td>Curriculum Instruction Education Internship Fee CATE 406V, 5016 CIED 3003/3001, 3033, 3103, 3113, 3123, 3133, 3143, 3263, 4113, 4133, 4143, 4153, 4173, 514V, 528V</td>
</tr>
<tr>
<td>Fifth-year Internship Fee (M.A.T.) CIED 508V, CIED 514V, CIED 528V, PHED 507V, CATE 5016</td>
</tr>
<tr>
<td>First Responder Special Course Fee HLSC 3633</td>
</tr>
<tr>
<td>HHPR Internship Fee KINS 4903</td>
</tr>
<tr>
<td>HHPR Internship Fee RESM 440V</td>
</tr>
<tr>
<td>Internship for Communication Disorders CDIS 578V</td>
</tr>
</tbody>
</table>

## Internship Program in Education Leadership and support for Leadership seminars EDLE 574V, EDLE 674V | 25.00/semester |
| Kinesiology Course Supply Fee KINS 3533, 5593 | 3.33/credit hour |
| Malpractice liability insurance | 14.50/semester |
| Nursing Clinical Fee NURS 3321L, 3424, 3644, 3752, 4164, 4262, 4452, 4613, 4722 | 145.00/credit hour |
| Nursing Test Fee – First semester Junior year | 140.00/semester |
| Nursing Test Fee – Second semester Junior year, First and Second semester senior year | 110.00/semester |
| Off-Campus Practicum: Public School Site CDIS 548V | 50.00/semester |
| Advanced Clinical Practicum: CDIS 528V | 50.00/credit hour |
| Outdoor Adventure Leadership Fee RECR 4023 | 33.33/credit hour |
| PEAC 1481 Beginning Archery | 5.00/credit hour |
| PEAC 1811 Beginning Canoeing | 25.00/credit hour |
| PEAC 1831 Beginning Scuba Diving | 130.00/credit hour |
| PEAC 1901 Climbing | 50.00/credit hour |
| PEAC 1901 Cycling | 75.00/credit hour |
| PEAC 1901 Hiking | 125.00/credit hour |
| PEAC 1901 Padding | 75.00/credit hour |
| PEAC 1901 Racquetball | 10.00/credit hour |
| PHED 3002 Teaching and Leading Outdoor Recreation and Experiential Activities | 10.00/course |
| PHED 407V Student Teaching Supervision | 75.00/semester |
| RECR 1023 Recreation and Natural Resources | $20/course |
| Special Education Lab fee, Practicum CIED 532V | 25.00/credit hour |

## College of Engineering

<table>
<thead>
<tr>
<th>College of Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEEG 2100 course fee, computer aided design (CAD) competency</td>
</tr>
</tbody>
</table>

*Due initial semester of enrollment, paid in semester installments, and retroactive to 8/15/2003

## Teaching Equipment and Laboratory Enhancement Fees

These fees provide and maintain state-of-the-art classroom equipment and instructional laboratory equipment. These fees vary, based upon the student's college of enrollment.

During the regular fall, spring and summer academic semesters, these fees are assessed on a per credit hour basis (see chart below).

### Teaching Equipment and Laboratory Enhancement Fees

<table>
<thead>
<tr>
<th>College or School</th>
<th>Per Credit Hour Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural, Food and Life Sciences, Bumphers College of</td>
<td>$16.00</td>
</tr>
<tr>
<td>Architecture, Fay Jones School of</td>
<td>20.36</td>
</tr>
<tr>
<td>Arts and Sciences, Fulbright College of</td>
<td>12.00</td>
</tr>
<tr>
<td>Business, Walton College of</td>
<td>19.81</td>
</tr>
<tr>
<td>Education and Health Professions</td>
<td>11.90</td>
</tr>
<tr>
<td>Engineering</td>
<td>31.05</td>
</tr>
</tbody>
</table>
Fee and Cost Estimates

For parking services fees, charges, and refund policies contact: Parking and Transit, Administrative Services Building, 155 Razorback Road, (479) 577-3507.
For other fees, charges, and refunds, contact the Treasurer’s Office, 213 Arkansas Union, Attention: Treasurer, (479) 575-5651.

Students receiving financial aid are strongly encouraged to have sufficient personal funds available to purchase books and to meet necessary expenses for at least one month at the start of school as some aid funds may not be available for disbursement.

For parking services fees, charges, and refund policies contact: Parking and Transit, Administrative Services Building, 155 Razorback Road, (479) 577-3507.

For other fees, charges, and refunds, contact the Treasurer’s Office, 213 Arkansas Union, Attention: Treasurer, (479) 575-5651.

Students receiving financial aid are strongly encouraged to have sufficient personal funds available to purchase books and to meet necessary expenses for at least one month at the start of school as some aid funds may not be available for disbursement.

For the purpose of these regulations, the University of Arkansas defines as an "in-state" or "out-of-state" student for fee purposes, as established under these regulations.

Except as otherwise provided under these regulations, a student classified as an "in-state" student fees and tuition purposes at the time of admission must have resided continuously in this state in that bona fide domiciliary status for at least six consecutive months prior to the beginning of the term or semester for which fees are paid.

A bona fide domicile is a home of apparent true, fixed, and permanent nature, a place of actual residing for all purposes of living that may be distinguished from a temporary sojourn in this state as a student. The person claiming domicile in Arkansas must provide evidence of permanent connection with the State of Arkansas and demonstrate the expectation of remaining in this state beyond graduation. For purposes of implementing these policies, the Administration is directed to articulate standards that will be applied in making the determination of residence.

Except as otherwise provided under these regulations, the domicile of an adult (18 years of age or older) or emancipated minor student is determined on the basis of his or her own domicile.

Except as otherwise provided under these regulations, the domicile and residence of an unmarried minor student (less than 18 years of age) or an unmarried dependent who has not attained the age of 23 is legally that of the parents or surviving parent; or such other person legally standing in the place of a parent to the student and with whom the student in fact makes his or her home and who has been making substantial contributions to the support of the student for at least six consecutive months prior to the term or semester for which the fees are paid.

A student who does not satisfy the criteria for Arkansas domicile and residence will be classified as an "out-of-state" student and will pay fees and tuition accordingly. The student on a temporary visa will be classified as a foreign student and will pay non-resident tuition and fees. A student who has been granted a permanent visa and has been domiciled in Arkansas for six consecutive months following receipt of the permanent visa shall be classified as an Arkansas resident for fee purposes.

The responsibility for registering under a proper classification for student fee purposes is placed upon the student. It is the duty of each student at each time of registration to call any question about residency classification status to the attention of the campus classification review officer in a timely fashion in order that the question may be settled (see 4. Procedures).

The six-month period required in paragraph A of these regulations may be waived for persons, their spouse, and their unmarried children who have not yet attained the age of 23 (dependents are the spouse and unmarried children who are legal dependents as defined by the IRS) and who move to Arkansas with attendance at the University only a by-product of the primary purpose of establishing domicile in this state.

An unmarried student who has not reached the age of 23 years having one parent residing in Arkansas (for at least six consecutive months immediately prior to the beginning of the term or semester in which the fees are to be paid) may be considered an "in-state" student for fee purposes, even if that student resides outside the state with the other parent before coming to Arkansas to attend the University.

Marriage is recognized as emancipation for both females and males.

The spouse of a person continuously domiciled in Arkansas (for at least six consecutive months immediately prior to the beginning of the term or semester in which the fees are to be paid) upon request shall be classified as "in-state" for fee purposes.

3. Reclassifications

a. The initial classification of a student will not prejudice a different classification for following terms or semesters. However, a student's prior domicile is assumed to continue until he or she clearly establishes a new domicile in Arkansas (see #4 below).

b. A student previously classified as "out-of-state" may be reclassified as "in-state" for fee purposes if he or she has established a bona fide domicile in Arkansas and has resided continuously in this state in that bona fide domiciliary status for at least six consecutive months prior to his or her reclassification by the University. In order for an adult or an emancipated minor to establish a bona fide domicile in Arkansas for fee purposes, he or she must have left the parental home, must have established in this state a home of a permanent character as manifested objectively by good faith acts, and must have the expectation of remaining in this state beyond graduation. The single fact of presence in Arkansas for at least six months of attendance as a student enrolled in the University of Arkansas, or any other educational institution, neither constitutes nor necessarily precludes reclassification as one domiciled in Arkansas, but will be a factor to be considered.

4. Procedures

a. A student shall have the burden of establishing any claim that he or she is entitled to be treated as "in-state" for fee purposes. Persuasive evidence to that effect must be presented in writing and verified under oath by the student. Mere claims of local domicile and duration of stay are of little weight. A student who knowingly gives erroneous information in an attempt to evade payment of "out-of-state" fees may be subject to dismissal from the University.

b. All disputed classifications for student fee purposes, whether at initial enrollment or subsequent enrollments, and all disputed reclassifications will be decided initially on each campus by a classification review officer designated by each Chancellor.

c. The Chancellor of each campus will designate a campus classification appeal officer to receive petitions from decisions made by the campus classification review officer. Each campus classification appeal officer may, in his or her discretion, make investigations, receive evidence, and conduct informal hearings. After considering the case, the campus classification appeal officer will render a decision and notify the affected student of the decision in writing. Any decision of the campus classification appeal officer may be appealed to the Vice President for Academic Affairs of the University of Arkansas System, who shall recommend final disposition to the President of the University.

d. Written notice of the appeals procedure will be provided to each student raising a question about his or her status with the campus residency classification review officer.

e. Determination of domicile will be based on a review of all pertinent facts,
evidence, and circumstances that collectively show, in an objective and clear manner, the actual domicile of the student.

NOTE: In implementing these policies, it is presumed that dependent students who are classified as non-residents based upon parental/guardian domicile outside of Arkansas do not acquire Arkansas residency under Board of Trustees Policy 520.8 unless and until their parent(s)/guardian(s) have established a domicile in Arkansas, or the student has left the parental home and established a domicile in Arkansas evidenced by proof that he or she has established a home of a permanent character as manifested objectively by good faith acts, resided in Arkansas in bona fide domiciliary status for at least six consecutive months prior to his or her reclassification as an Arkansas resident, and demonstrates the expectation of remaining in this state beyond graduation.

Reclassification Deadlines

Students who have established a bona fide domicile in Arkansas following initial classification as a non-resident must request reclassification if they want their status recognized for fee purposes. Applications and appropriate documentation must be received by the Office of the Registrar no later than the fifth class day (second class day of a summer session) of the term for which in-state fee assessment is requested. Applications received after the deadline will be considered for the next term. All fees are to be paid by published due dates. Students who receive a favorable decision after payment will be provided a refund of out-of-state fees paid. Please direct questions about residence classification review procedures to the Office of the Registrar, 146 Silas H. Hunt Hall.

Resident Status of Native Americans

(Board Policy 520.1, “Waiver of Non-Resident Tuition for Native Americans.”)

Native American people in other states belonging to tribes that formerly lived in Arkansas before relocation, and whose names are on the rolls in tribal headquarters, shall be classified as in-state students of Arkansas for tuition and fee purposes, on all campuses of the University of Arkansas. Tribes so identified include the Caddo, Cherokee, Chickasaw, Choctaw, Creek, Delaware, Kickapoo, Osage, Peoria, Quapaw, Shawnee, and Tunica.

Resident Status of Members of the Armed Forces and Their Dependents

(Board Policy 520.7, “Fees for Members of Armed Forces and Dependents.”)

Effective January 1, 1975, members of the Armed Forces who are stationed in the State of Arkansas pursuant to military orders, and their unemancipated dependents, shall be entitled to classification as in-state students for fee paying purposes (per Arkansas stat. Ann. 80-3366).

Persons continuously domiciled in Arkansas for at least 12 consecutive months who enter active military service from this state and who maintain Arkansas as the permanent home of record while on active military duty, and their dependents (the spouse and unmarried children who are legal dependents of the military person as defined by the IRS), shall be entitled to classification as in-state students for fee paying purposes. This provision is forfeited if the military person does not return to Arkansas within twelve months after separation, discharge, or retirement from active duty.

Persons serving in active military service who demonstrate a change of bona fide domicile from another state to Arkansas at least twelve consecutive months prior to separation, discharge, or retirement from active military duty, and the dependents (the spouse and unmarried children who are legal dependents of the military person as defined by the IRS), shall be entitled to classification as in-state students for fee paying purposes. This provision is forfeited if the military person does not return to Arkansas within twelve months after separation, discharge, or retirement from active duty.

Resident Status of Students from Texarkana, Texas, and Bowie County, Texas

(Board Policy 520.10)

In accordance with the reciprocity agreement described in H.C.R. 32, signed by the Governor of Arkansas on February 12, 1965, Board Policy 520.10 states, “Residents of Texarkana, Texas and Bowie County, Texas, will be classified as in-state students for University fee purposes at the University of Arkansas.”
ACADEMIC INTEGRITY

I. Preamble:
As a community of scholars, we uphold academic integrity and our Honor Statement as foundational to appropriate conduct within the university setting. The fundamental trust that work presented as one's own truly represents one's own intellect and effort underlies our mission as an educational, research and service institution; moreover, this trust is central to our peers' recognition of the value of a University of Arkansas degree. Thus, this document represents a deeply- and commonly-held set of values. Because this trust is so essential to the enterprise of the University of Arkansas, this policy has been established to set forth the University's commitment to academic integrity and to create procedures to address allegations of academic misconduct in a fair and unified manner.

Responsibility for understanding and adhering to the values of academic integrity, including being familiar with and complying with this policy, lies with individual students as members of the University community. The University shall assist students in meeting this responsibility through educational efforts such as training held during both undergraduate and graduate student orientation, and on-line training modules, and may also include training during program-level orientation and in individual classrooms. The University shall also provide a statement on academic integrity that faculty will be encouraged to include in all course syllabi. Again, however, as developing scholars, students must take the initiative to familiarize themselves with and clarify expectations regarding academic integrity.

II. Definitions:

Academic Dishonesty: Academic dishonesty involves acts that may subvert or compromise the integrity of the educational or research process at the University of Arkansas, when such acts have been performed by a UA student. Academic dishonesty includes, but is not limited to, any act by which a student gains or attempts to gain an academic advantage for him/herself or another by misrepresenting his/her or another's work or by interfering with the independent completion, submission, or evaluation of academic work. Academic dishonesty may include those acts defined as research or scholarly misconduct; such academic integrity issues are subject to review under this policy as well as under the University's Research and Scholarly Misconduct Policy. Which policy applies to particular allegations is addressed in more detail below; if necessary, the Research Integrity Officer, in consultation with the student's dean, shall determine which policy is most appropriate for a given case.

Academic Integrity Monitor: In each college/school, one or more Associate Deans will be designated by the Dean, subject to approval by the Provost, as the Academic Integrity Monitor(s). The Academic Integrity Monitor shall be responsible to conduct an initial review of allegations of academic dishonesty at the college/school level to determine whether there is sufficient evidence of a violation for the matter to be considered by the All-University Academic Integrity Board (Board or AUAIIB), as defined below. When a student admits responsibility for an infraction, the Academic Integrity Monitor recommends a sanction to the Board, based on the Sanctions Rubric. The Academic Integrity Monitor is the School or College's liaison to the Board, and will have primary responsibility for presenting a case to the Board when necessary. If the Academic Integrity Monitor determines the evidence is not sufficient for consideration by the Board, the case will be dismissed unless the instructor (with the support of the Chair) appeals the Monitor's determination to the Board.

All-University Academic Integrity Board (Board or AUAIIB): The Board is responsible for reviewing contested allegations of academic dishonesty and contested sanctions referred by the Academic Integrity Monitor. The Board is responsible for making sure that any finding of responsibility for academic misconduct is supported by a preponderance of the evidence and for imposing sanctions consistent with the Sanctions Rubric when a student is found responsible for a violation. The Board is responsible for ensuring that academic integrity sanctions are applied in a consistent manner. Ordinarily, in making its determinations, the Board will not take student intent into account, but instead will focus primarily on the actions of those involved. The Board reviews and makes a determination on all cases in which 1) students are contesting their responsibility (or instructors, with the support of the Department chair, are contesting findings that students are not responsible) for alleged infractions or 2) students are contesting sanctions. In addition, in cases where the student accepts responsibility and does not contest sanctions, the Board reviews sanctions recommended by the Academic Integrity Monitor and imposes sanctions consistent with the Sanctions Rubric. When reviewing cases, the Board may request further information and require participation in a hearing by the instructor and/or students (if deemed appropriate by the Board).

The Board is composed of six faculty or instructional staff (one from each undergraduate academic college), one faculty representative of the library, one representative of the Graduate School or Honors College, and two students (one graduate and one undergraduate). In order to facilitate timely review of cases, there will be two such committees constituted each year and each of these committees will meet one time per month. The committees will elect their own chair. The Director of OAISC will be an ex officio member of the AUAIIB. (Note: The School of Law has its own academic integrity process.) There will also be a pool of trained alternates who can sit on the Board in the event that a member is unable to attend a hearing due to a schedule conflict, illness, conflict of interest, or the like. A third committee, which may be comprised of members of the other two committees, will meet during the summer.

Complete Written Record: The complete written record for each case refers to all relevant documents submitted by the student as well as a University representative as evidence related to the allegations of academic dishonesty. The complete written record is initially compiled by the Academic Integrity Monitor but subsequently is forwarded to and maintained by, and may be added to, by the Office of Academic Integrity and Student Conduct.

Jurisdiction: The Academic Integrity Monitor is responsible for the initial review of all undergraduate cases involving work in courses taken in his/her college. The Academic Integrity Monitor is also responsible for initial review of all cases involving allegations of academic dishonesty in other academic work (with the exception of those cases reviewed under the Research Misconduct Policy), when the faculty member who has oversight responsibility for that student (e.g. major professor, faculty collaborator, honors advisor, advisor) resides within the college. When a student is majoring in a program outside the college in which an academic integrity matter
Aries, the Academic Integrity Monitor of the other college should be kept informed about the case and its resolution. The Academic Integrity Monitor in the Graduate School is responsible for all cases of alleged academic dishonesty involving graduate students (including, without limitation, all allegations relating to course work or work outside a class), with the exception of those cases which fall under the jurisdiction of the Research Misconduct Policy.

Office of Academic Integrity and Student Conduct (OASIC) (formerly Office of Community Standards and Student Ethics): Housed in the Office of the Provost/Vice Chancellor for Academic Affairs, this is the University-level office tasked with processing academic misconduct cases that are sent forward from the colleges. This Office is responsible for reporting back to the academic colleges, the Provost, and the Faculty Senate, consistent with the requirements of the Family Educational Rights and Privacy Act (FERPA), an annual total of cases heard and their outcomes, as well as the general basis for the decisions made. This Office is the repository of all records pertaining to academic integrity cases across campus.

Preponderance of Evidence: The standard of proof in a case arising under the Academic Integrity Policy shall be the “preponderance of the evidence.” A “preponderance of the evidence” shall mean evidence which is of greater weight or more convincing than evidence to the contrary; evidence which shows that something more likely than not is true.

Reporting: Following initial compilation by the Academic Integrity Monitor, all records will be kept in OASIC. A final report summary for each case will be forwarded to the college Academic Integrity Monitor, to the department chair/head, and to the instructor. Annual summary reports (with no details with respect to specific faculty or students) will be reported to the Colleges and to the Faculty Senate.

Sanction Rubric: Sanctions associated with various levels of academic misconduct, approved by the Faculty Senate and applicable to all student academic work at the University of Arkansas. All sanctions will be imposed by the AUAIB.

Academic Honesty Syllabus Statement: Faculty are encouraged to include this statement on their syllabus:

“As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail.”

“Each University of Arkansas student is required to be familiar with and abide by the University’s ‘Academic Integrity Policy’ which may be found at http://provost.uark.edu/ Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.”

Student: An undergraduate student is one who is enrolled at the University of Arkansas during the semester of the infraction in a baccalaureate degree program or in an undergraduate non-degree-seeking status. A graduate student is one who has been admitted to the Graduate School and need not be enrolled to be considered a student under this policy.

Work for a course: “Work for a course” consists of any work undertaken or submitted towards the fulfillment of the requirements of a course (whether graded or not), including, but not limited to, exams, quizzes, papers, essays, homework assignments, artwork, designs, programs, and other projects or assignments.

Work outside of a course: “Work outside a course” consists of student work, other than work for a course, undertaken or submitted towards the fulfillment of the requirements of a degree or program, including, but not limited to, candidacy or comprehensive exams, dissertations, honors theses, master’s theses, work done for funded research projects, reports submitted to a funding agency or material submitted for publication in a scholarly journal.

Working Days: Working days shall refer to Monday through Friday, excluding official University holidays or days that the University is closed due to exigent circumstances such as weather. For periods of five days or less, University breaks shall also be excluded.

III. Procedures:

A. Infractions Involving Work for a Course at the Undergraduate or Graduate Level

1. Reports of Suspected Academic Dishonesty. When an instructor/department initially suspects that a student has violated the Academic Integrity Policy, the instructor or another appropriate University official may discuss the matter with the student and/or with the Academic Integrity Monitor for the college or school. Should the instructor/department determine that the student may be responsible for academic dishonesty, the instructor or another appropriate University official will, within five working days after determining that there is a potential violation of the Academic Integrity Policy (or as soon as practicable thereafter), report the case to the Academic Integrity Monitor for the college. In reporting the case, the instructor/official will submit a completed “Allegation Evidence Form,” available on the OASIC website, to help ensure that all information necessary to the consideration of the case is available for review.

2. The Academic Integrity Monitor. The Academic Integrity Monitor will review the case and meet with the instructor to gather any relevant information relating to any alleged violations of the Academic Integrity Policy. The Academic Integrity Monitor shall meet separately with the student to notify the student of the alleged violations of the Academic Integrity Policy, disclose to the student any evidence to be used against him or her, and gather information from the student about the matter. The Monitor will have access to any previous academic integrity-related records for the student from the OASIC and may review pertinent records or speak with other individuals with knowledge about the matter. Information compiled by the Academic Integrity Monitor may be added to the written record. After conducting this review the Academic Integrity Monitor may proceed as follows:

a. The Academic Integrity Monitor may determine that the evidence of an alleged violation is insufficient to warrant forwarding the case to the Board. In this case, the Academic Integrity Monitor will notify the instructor/Department and student of his/her determination. The complete written record of the Academic Integrity Monitor’s determination will be forwarded to the OASIC, and a summary of the matter shall be provided to the AUAIB for its information.

b. Alternatively, the Academic Integrity Monitor may determine there is sufficient evidence of a violation to forward the matter to the Board for its consideration, in which case the following may occur:

i. The student accepts responsibility for the infraction: In this case, the Academic Integrity Monitor shall inform the student of the potential consequences of the action. The Academic Integrity Monitor completes the file and recommends the appropriate sanction for consideration by the AUAIB consistent with the Sanction Rubric. Makes a record of the case which is forwarded to the OASIC and AUAIB, and reports back to the Department/program and instructor.

ii. The student contests responsibility for the infraction: In this case, the Academic Integrity Monitor will forward the case together with the evidence to OASIC and AUAIB. Within five working days from receipt of the Allegation Evidence Form (or as soon thereafter as practicable), a representative from OASIC will contact the student and arrange a meeting during which the process and possible outcomes are explained to the student. As part of the complete written record, the student will be provided with an opportunity to submit a written statement responding to the allegations and explaining why he/she did not commit the alleged infraction. Ordinarily, the student will not provide a statement pertaining to intent, unless it materially affects the question of whether the student committed a violation of the Academic Integrity Policy.

iii. The student contests the sanctions: If the student 1) accepts responsibility but disagrees with the Academic Integrity Monitor’s sanction recommendation, or 2) contests responsibility and sanctions, the student will be provided an opportunity to submit a written statement explaining the student’s position on sanctions and proposing alternatives. If the proposed sanction is based on the sanction rubric, the statement must address how the rubric has been applied incorrectly in the student’s case.

3. Standard of Evidence. The standard used in reviewing whether a violation
The YOU of A

Academic Regulations

D. Appeals. Students (or the instructor, with the support of the Department Chair) may appeal a determination by the AUAB to the Provost and Chancellor, but only when the appeals are based on the following grounds: (1) a procedural error occurred; (2) an objective assessment of the evidence under the preponderance of evidence standard does not support a finding of responsibility; (3) new and significant evidence has been identified since the Board hearing; (4) the sanctions are inconsistent with the Sanction Rubric; or (5) that additional sanctions imposed are excessive. To effect an appeal, the student (or instructor/department), within five working days of transmittal of the decision of the AUAB to the student (or instructor/department), shall request that the Provost and Chancellor review the case, using the “Appeal Form” found on the website of the OAISC. The transmittal of the decision by the AUAB shall expressly state that the student (or instructor/department) shall have five days to appeal the decision. The Provost and Chancellor shall attempt to review and resolve all appeals within thirty days or as soon as possible thereafter after receiving the Appeal Form. If the Provost and Chancellor determine that a procedural error occurred, that an objective assessment of the evidence does not support a finding of responsibility, that new evidence warrants a rehearing, that an inconsistency in sanction has occurred, or that additional sanctions are excessive in nature, the Provost and Chancellor may decide the matter or may refer the case back to the same or to another AUAB for further action. If a new hearing is held, the case may be appealed to the Provost and Chancellor using the procedure outlined above, in which case their determination on the matter shall be final.

E. Procedural Changes. Particular circumstances in an individual case may dictate variation from the procedures set out in this policy in order to ensure fair and efficient consideration of the matter. Any change in the procedures must ensure fair treatment of the student. Any major deviations from the procedures described in this policy shall be made only with the written approval of the Provost.

ACADEMIC INTEGRITY SANCTION RUBRIC

I. Violation Levels

The following violation levels are assigned to specific types of violations of the University’s Academic Integrity Policy; if a violation of academic integrity principles occurs which is not specifically provided for below, then any sanctions will be based on the most similar type of violation that exists in the rubric. A violation will be considered as a single violation up until the point that a student receives notice of that violation; additional infractions occurring after that point will be considered separately for purposes of this rubric.

A student receives the assigned number of sanction points for each violation for which he/she is found responsible. Sanction points are cumulative over the length of the student’s tenure at the University of Arkansas.

Level One Violation – 0.5 sanction point for each violation

• Copying from or viewing another student’s work during an examination.
• Using any materials or resources that are not authorized by the instructor for use during an examination.
• Collaborating during an examination with any other person by giving or receiving information without specific permission of the instructor.
• Facilitating or aiding in any act of academic dishonesty.
• Collaborating on laboratory work, take-home examinations, homework, or other assigned work when instructed to work independently.
• Submitting, without specific permission of the instructor, work that has been previously offered by the same student for credit in another course.
• Falsification of attendance and/or participation.
• Plagiarizing, that is, the offering as one’s own work, the words, ideas, or arguments of another entity (person or computer program) to pass as one’s own work.
• Submitting as one’s own any theme, report, term paper, essay, computer program, speech, painting, drawing, sculpture, or other written or creative work or project of any nature prepared totally or in large measure by another.

Level Two Violation – 1.0 sanction point for each violation

• Buying, selling or otherwise obtaining or providing information about an examination not yet administered.
• Substituting for another person or permitting any other person to substitute for oneself to take an examination.
• Submitting as one’s own any theme, report, term paper, essay, computer program, speech, painting, drawing, sculpture, or other written or creative work or project of any nature prepared totally or in large measure by another.
• Submitting altered or falsified data (undergraduate level).
• Plagiarizing (graduate level).
• Level Three Violation – 3.0 sanction points for each violation
• Altering grades or official records.
• Falsifying or signing another person's name on any academically-related
  University form or document.
• Sabotaging another student’s work.
• Submitting altered or falsified data (graduate level)

II. Sanctions
Sanction points = 0.5: For work for a course, the instructor shall give the test
or an assignment an immediate zero (0) which shall then be averaged into
the course grade. If the violation occurred on work outside of a course, the
faculty member will require that the work be redone. If that involves missing
a stated deadline, the stated late penalty will apply.
Sanction points = 1.0: The student will receive a course grade of XF for work
done for a course; for work outside a course, the student will receive a failure
on the project (e.g. on the candidacy exam).
For infractions involving point levels of 1.5 and above, the course grade/project
failure sanction will apply in addition to suspension or expulsion.
Sanction points = 1.5: The student will be suspended for the following semester
(the student will be allowed to complete the current semester).
Sanction points = 2.0: The student will be suspended for two full semesters (the
student will be allowed to complete the current semester).
Sanction points = 2.5: The student will be suspended for three full semesters
(the student will be allowed to complete the current semester).
Sanction points = 3.0 or more. The student will be immediately and perma-
nently expelled.

Note: For offenses not specifically mentioned in this rubric, faculty members may
confer with the Academic Integrity Monitor and propose a description of the offense
and the level of sanction to be included in the faculty member's syllabus. The proposed
description and sanctions will be forwarded to the Academic Integrity Monitor to
review the proposed offense and sanction for consistency with existing offenses and
sanctions. If a faculty member and Academic Integrity monitor disagree over a par-
ticular offense or sanction, the matter may be discussed with the relevant dean and / or
the AUAIB, but must be reported to the AUAIB. In the event of a conflict between
a syllabus and the Academic Integrity Policy or this rubric, the policy and rubric shall
take precedence.

III. Course Retake Opportunities and Notation Removal
After two semesters of acceptable performance at the University following the im-
position of a penalty, with no student conduct or academic dishonesty infractions and
a minimum grade point of 2.0 (undergraduate) and 2.85 (graduate) in graded courses,
the student may petition the Office of Academic Integrity and Student Conduct for
an opportunity to retake a class failed due to academic dishonesty and have the grade
changed (for graded work), for a first offense of any Level One or Level Two violation,
or a second offense of a Level One violation.
Upon graduation or completion of the period of suspension, the student may
request that the X, or notation of the student's suspension, be removed from the stu-
dent's transcript, by submitting a written request to the Provost/Vice Chancellor for
Academic Affairs. Expulsion from the University of Arkansas for academic dishonesty
shall be permanently noted on the student's transcript.

TERM PAPER ASSISTANCE
The use of services of term paper assistance companies is a violation of University
policies on academic integrity. Student submission of such research or term papers
to meet requirements of any class or degree program is expressly prohibited and
constitutes academic dishonesty. Any violation of this prohibition will automatically
result in both punitive action by the instructor (e.g., the award of a grade of "F" for
the course) and a referral of each violation to the All-University Judiciary Committee
for its consideration.

ATTENDANCE
Education at the university level requires active involvement in the learning
process. Therefore students have the responsibility to attend classes and to actively
engage in all learning assignments or opportunities provided in their classes. Instruc-
tors have the responsibility to provide a written policy on student attendance that is
tied to course objectives included in a course syllabus. There may be times, however,
when illness, family crisis, or University-sponsored activities make full attendance or
participation impossible. In these situations students are responsible for making timely
arrangements with the instructor to make up work missed. Such arrangements should
be made in writing and prior to the absence when possible.
Examples of absences that should be considered excusable include those resulting
from the following: 1) illness of the student, 2) serious illness or death of a member of
the student's immediate family or other family crisis, 3) University-sponsored activities
for which the student's attendance is required by virtue of scholarship or leadership/
participation responsibilities, 4) religious observances (see UA Religious Observances
policy below), 5) jury duty or subpoena for court appearance, and 6) military duty.
The instructor has the right to require that the student provide appropriate documenta-
tion for any absence for which the student wishes to be excused.

RELIGIOUS OBSERVANCES
When students seek to be excused from class for religious reasons, they are
expected to provide their instructors with a schedule of religious holidays that they
intend to observe, in writing, before the completion of the first week of classes. The
Semester Calendar on the Office of the Registrar’s Web site will inform students of
the University calendar of events, including class meeting and final examination dates,
so that before they enroll they can take into account their calendar of religious obser-
vances. Scheduling should be done with recognition of religious observances where
possible. However, faculty members are expected to allow students to make up work
scheduled for dates during which they observe the holidays of their religion.

FINAL EXAMINATION POLICY
Each faculty member is required to give final examinations at times specified
in the final examination schedule. (Comprehensive examinations are not the only
ones which qualify as “final exams.” Generally, exams should not be given during the
last class period.) Whenever circumstances make necessary a deviation from the an-
nounced schedule, clearance for such deviation must be obtained from the appropri-
ate dean and the Provost and Vice Chancellor for Academic Affairs.

During finals week, students are required to sit for no more than two final exams
in a single calendar day period. Students with three or more finals in a single calendar
day period have the right to an alternative exam date(s) for each exam exceeding two.
They must submit a formal request for an alternative date in writing, along with an
official copy of their class schedule for verification purposes, to the professors of those
classes involved to see if one will voluntarily move the exam. If voluntary accom-
modation is not achieved, instructors of classes with lower enrollments will have to
accommodate before classes with higher enrollments.

Requests must be submitted on or before the last day to drop a full semester class
or classes with a mark of “W.” Professors will provide the student with an alternative
exam date and time no later than one week after the last day to drop a full semester
class or classes with a mark of “W.” All rescheduled final exams are to take place during
the university designated final exam dates and times. If a student has an objection to
the alternative exam date/time, she or he may appeal to the instructor’s department
chair.

It is the policy of the University to minimize student participation in extracur-
ricular activities during the final examination period. No meetings, social activities,
athletic events, or other extracurricular activities that require student participation will
be scheduled on Dead Day or during the final examination period. Any exceptions to
this policy must receive prior approval from the Provost/Vice Chancellor for Academic
Affairs.
GRADES AND MARKS

Final grades for courses are “A,” “B,” “C,” “D,” and “F” (except for courses taken in the Fay Jones School of Architecture and the Dale Bumpers College of Agricultural, Food and Life Sciences).

<table>
<thead>
<tr>
<th>Grade/Mark</th>
<th>Given For</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Outstanding achievement, given to a relatively small number of excellent scholars</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good achievement</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average achievement</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Poor but passing work</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure, unsatisfactory work</td>
<td>0</td>
</tr>
<tr>
<td>XF</td>
<td>Failure, academic dishonesty</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete course requirements</td>
<td>N/A</td>
</tr>
<tr>
<td>AU</td>
<td>Audit, officially registered</td>
<td>N/A</td>
</tr>
<tr>
<td>CR</td>
<td>Credit without grade points</td>
<td>N/A</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory work in courses w/o credit</td>
<td>N/A</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>N/A</td>
</tr>
</tbody>
</table>

No credit is earned for courses in which a grade of “F” is recorded. A final grade of “F” shall be assigned to a student who is failing on the basis of work completed and who has not completed all requirements. The instructor may change an “F” to an “I” so assigned to a passing grade if warranted by satisfactory completion of all requirements. Students who fail to present an acceptable reason for not having completed all course requirements including the final examination will receive the grade they would have received had they failed such requirements. In the case of an “XF” grade given for reasons of academic dishonesty, upon graduation or completion of the period of suspension, the student may request that the “X” be removed from the transcript by submitting a written request to the Provost/Vice Chancellor for Academic Affairs.

A mark of “I” may be assigned when a legitimate good cause has prevented the student from completing all course requirements, and the work completed is of passing quality. It is the discretion of the instructor that determines what qualifies as a legitimate good cause. It is recommended that the instructor, prior to the assignment of an “I” mark, document the legitimate good cause and conditions for completing course requirements. An “I” so assigned may be changed to a grade provided all course requirements have been completed within 12 weeks from the beginning of the next semester (excluding summer semesters) of the student's enrollment after receiving the “I.” If the instructor does not report the grade within the 12-week period, the “I” shall be changed to an “F.” When a mark of “I” is changed to a final grade, the grade points and academic standing are appropriately adjusted on the student's official academic records.

A mark of “AU” (Audit) is given to a student who officially registers in a course for audit purposes (see Registration for Audit). A mark of “CR” (Credit) is given for a course (for example, practice teaching, certain seminars, certain honors colloquia, and courses where credit is earned by examination) for which the University allows credit toward a degree, but for which no grade points are earned.

A mark of “S” (Satisfactory) is assigned in courses such as special problems and research when a final grade is inappropriate. The mark “S” is not assigned to courses or work for which credit is given (and thus no grade points are earned for such work). If credit is awarded upon the completion of such work, a grade or mark may be assigned at that time, and, if a grade is assigned, grade points will be earned.

A mark of “W” (Withdrawal) will be given for courses from which students withdraw after the first 10 days of the semester and before the drop deadline of the semester.

“I,” “AU,” “CR,” “S,” and “W” marks will not be counted in the grade-point average. Grades of plus and minus are assigned grade-point values in the Bumpers College of Agricultural, Food and Life Sciences (page 78) and the Fay Jones School of Architecture (page 110). The grade-point average is computed by dividing the total number of grade points by the total number of credit hours attempted in courses for which grades (rather than marks) are given. Students who utilized grade renewal or grade forgiveness in retaking courses (prior to Fall Semester 1986 and after Fall 1996) have only the last grade used in computing grade-point averages.

UNDERGRADUATE GRADE FORGIVENESS POLICY

Under the Grade Forgiveness Policy, a student may improve the undergraduate cumulative GPA by repeating a maximum of two courses (up to nine hours) in which a grade of “D” or “F” was received and requesting that the repeat grade be the only one that is counted in the calculation. Only two such requests are available to any student in his or her undergraduate career. The repeated grade must be in the same course taken at the University of Arkansas, Fayetteville. Only a course in which a grade of “D” or “F” was earned may be repeated under the Forgiveness Policy. Grade forgiveness may not be used to replace a grade assigned as a result of academic dishonesty. The student must file a written petition to use grade forgiveness indicating which course(s) he/she chooses to grade renew; the petition must be completed and approved prior to graduation. Both attempts at the course will remain on the transcript, but only the second will be used to calculate both credit and GPA. The first attempt and the grade earned will be recorded on the transcript with the symbol “R” to denote that it has been repeated. Students considering grade forgiveness should be aware that many graduate schools, professional schools, employers or other institutions, in considering admission or employment, recompute the GPA and include all courses attempted even though a course was repeated. This means that if the cumulative GPA has been raised because of grade renewal or forgiveness, the recomputed GPA will be lower.

HONORS AND SCHOLARS

SEMESTER HONOR ROLL

The colleges of the University publish, after the close of each semester, an honor roll of the highest ranking students in the college containing the names of not more than 10 percent of the undergraduate students of each class. Students are eligible for the honor roll if they are carrying at least 12 semester hours normally required for graduation by their college for their respective year. Most colleges refer to this part of the honor roll as the Dean's List.

In addition, a Chancellor's List is published each semester which recognizes those undergraduate students who achieve a 4.00 grade-point average. Students must also be carrying at least 12 semester hours normally required for graduation to be eligible for the Chancellor's List.

For honor roll eligibility, the 12 semester hours must all be in courses for which grade points are earned.

FIRST-RANKED SENIOR SCHOLARS

A first-ranked senior scholar must have a cumulative grade-point average of 4.00 on all course work completed at the time selection is made, must have applied for graduation for a semester to be a member of the appropriate class and must have completed all courses required for the baccalaureate degree at the University of Arkansas, Fayetteville, or in a program of study approved by the Director of Honors or other designee in the college in which the student is enrolled. In determining the cumulative grade-point average for the purposes of such awards, grade forgiveness is not accepted.

SENIOR SCHOLAR

Since 1941 a key has been awarded to the graduating senior from each undergraduate college who has the highest grade-point average and who has completed at least half of his or her degree work at the University of Arkansas.

GRADUATION HONORS

The faculty of each college will recommend for graduation with honors or with high honors those students it considers to be eligible for such distinction under its own regulations with the following general restrictions:

1. To be eligible for graduation honors a student must have completed at least one-half of his or her degree work at the University of Arkansas.
2. No student shall be eligible for graduation honors whose cumulative grade-point average is below 3.125.
3. A college should not recommend more than 10 percent of its graduating class for graduation honors except under unusual circumstances.
4. It is recommended that in determining graduation honors the faculty consider the whole of a student’s record but give greater weight to the last half of the record than to the first half.

ACADEMIC PROGRESS, SUSPENSION AND DISMISSAL

A student’s academic status at the University is determined at the end of each term of enrollment (fall, spring, or summer) on the basis of the student’s cumulative and/or term grade-point average (GPA) and number of hours earned. See the Academic Status chart for the required performance levels. The student’s academic status governs his or her re-enrollment status and determines any conditions associated with re-enrollment or denial of enrollment for a subsequent term. Normally, students are notified of their status individually by the University shortly after the end of each term. However, this policy statement is the formal notification to all students of the conditions that determine academic status and the consequences for each term, regardless of individual notification.

Good Status: Upon initial admission and during a student’s first term of enrollment, except for students conditionally admitted on academic warning, the student is in good status. A student remains in, or returns to, good academic status at the end of any term when the cumulative GPA is at or above the required minimum.

Academic Warning: When a student’s cumulative GPA falls below the minimum required for good status, the student will be put on academic warning. This status is not recorded on the student’s permanent academic record and will not appear on transcripts. A student who enroll for a term on academic warning may take no more than 12 hours (unless more are approved by the student’s adviser and dean). To continue for one or more additional terms on academic warning, the student must earn a term GPA at or above the cumulative GPA required for good status. The student can remain on academic warning until the cumulative GPA is at or above the required minimum for good status unless the student becomes subject to academic suspension by failing to earn the required term GPA.

Academic Suspension: A student on academic warning who does not earn the minimum required term GPA will be suspended from full-time enrollment. No student may be suspended who has not spent the prior term of enrollment on academic warning. A student on academic suspension has two alternatives: limited enrollment or academic leave of one year from the University.

Students who choose limited enrollment may enroll for up to nine hours of on-campus or Independent Study course work taken through Global Campus (as approved by the student’s adviser and dean) and must earn at least six hours of credit with grades of C or higher in six hours while maintaining a term GPA of 2.0. A student who meets these conditions may enroll for a subsequent term on academic warning following suspension. Students who meet the 2.0 GPA requirement but do not complete six hours will not be allowed to enroll for the remainder of the one year suspension period. Students who choose academic leave may apply for readmission one year after the term of the suspension. A student who does not earn credit from another institution will be readmitted on academic warning following suspension. A student who earns credit from another institution(s) during or subsequent to the year of suspension must apply to the University for admission as a transfer student and, if readmitted, will be on academic warning following suspension.

Academic Warning Following Suspension: A student on academic warning following suspension may take no more than 12 hours (unless more are approved by the student’s adviser and dean) and must earn a term GPA of 2.0 or higher for each term of enrollment until the student’s cumulative GPA is at the level required for good status. Failure to satisfy these requirements will result in dismissal.

Academic Dismissal: A student on academic suspension or academic warning following suspension who does not earn a term GPA of 2.0 or higher and satisfy all other requirements associated with his or her status will be dismissed from the University. A student who has been dismissed may be readmitted only upon action of the Academic Standards Committee. Course work taken through Independent Study while under dismissal may be submitted to the committee as evidence of academic competence. If readmitted, the student may receive degree credit for such course work.

Academic Warning Following Dismissal: A student who enrolls subsequent to an initial dismissal and following favorable action of the Academic Standards Committee is placed on academic warning following dismissal and may take no more than 12 hours (unless more are approved by the student’s adviser and dean) and must earn a term GPA of 2.0 or higher. Failure to satisfy these requirements will result in a second academic dismissal. A second dismissal is for five years, after which a student must petition for readmission to the University to the Academic Standards Committee and may also apply for Academic Bankruptcy. Individual colleges or programs have the discretion to set academic admission and continuation standards for specific programs that are higher than University standards.

ACADEMIC STATUS CHART

<table>
<thead>
<tr>
<th>Cumulative Hours Earned</th>
<th>Cumulative GPA</th>
<th>Placed on Academic Warning when cumulative GPA is</th>
<th>Continued on Academic Warning when term GPA is</th>
<th>Suspended* if previous status was warning and term GPA is</th>
<th>Dismissed** if previous status was suspension or warning following suspension and term GPA is</th>
<th>Continued on Academic Warning Following Suspension or Dismissal if previous status was suspension or dismissal and term GPA is</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-16 hours</td>
<td>1.50 or higher</td>
<td>Less than 1.50</td>
<td>1.50 or higher</td>
<td>Less than 1.50</td>
<td>Less than 2.00</td>
<td>2.00 or higher</td>
</tr>
<tr>
<td>17-32 hours</td>
<td>1.60 or higher</td>
<td>Less than 1.60</td>
<td>1.60 or higher</td>
<td>Less than 1.60</td>
<td>Less than 2.00</td>
<td>2.00 or higher</td>
</tr>
<tr>
<td>33-45 hours</td>
<td>1.75 or higher</td>
<td>Less than 1.75</td>
<td>1.75 or higher</td>
<td>Less than 1.75</td>
<td>Less than 2.00</td>
<td>2.00 or higher</td>
</tr>
<tr>
<td>46-60 hours</td>
<td>1.90 or higher</td>
<td>Less than 1.90</td>
<td>1.90 or higher</td>
<td>Less than 1.90</td>
<td>Less than 2.00</td>
<td>2.00 or higher</td>
</tr>
<tr>
<td>61 hours +</td>
<td>2.00 or higher</td>
<td>Less than 2.00</td>
<td>2.00 or higher</td>
<td>Less than 2.00</td>
<td>Less than 2.00</td>
<td>2.00 or higher</td>
</tr>
</tbody>
</table>

* No student may be suspended who has not spent the prior term of enrollment on academic warning.
** No student may be dismissed who has not been suspended during a prior term of enrollment.

REQUIREMENTS FOR GRADUATION

University Core Requirements (See chart on next page)

The University of Arkansas has adopted a “State Minimum Core” of 35 semester-credit-hours of general education courses that are required of all baccalaureate degree candidates. This is in compliance with Arkansas Act 98 of 1989 and the subsequent action of the Arkansas State Board of Higher Education. Beginning in the fall semester of 1991, all state institutions of higher education in Arkansas have a 35-hour minimum core requirement with specified hours in each of six academic areas. The University has identified those courses that meet the minimum requirement, and they are listed in the chart below.

Students should consult the requirements for specific colleges and programs when choosing courses for use in the University Core.

Rationale for U of A General Education Core

In order to prepare its students for lives of the highest individual quality and
the greatest potential contribution to the making of a better world, the University of Arkansas has developed a comprehensive program of general education. Although the basic skills, knowledge, methodologies, and judgments derived from experience in the core area set forth here may provide the basis for a major or professional concentration, the aims of these core requirements are not career specific. Rather, the following areas are designed to develop the tools for critical thinking and effective communication, an understanding of our richly diverse human heritage, the flexibility to adapt successfully to a rapidly changing world, a capacity for lifelong learning, and an enthusiasm for creativity.

English/Communication (6 hours)
Courses offered in this area are designed to develop the ability to organize ideas and to communicate them in grammatically correct written English with clarity, precision, and syntactical maturity. Freshman English courses taken at other universities will satisfy this requirement only if they are courses in composition. Students whose ACT scores in English are 18 or below must enroll in the sequence of courses ENGL 0002, ENGL 1013, and ENGL 1023. Students whose ACT scores in English are between 19 and 27 should enroll in ENGL 1013-1023. Students with English ACT scores of 28 or above may enroll in Honors English (1013H-1023H) or regular English (1013-1023). Students with English ACT scores of 30 or above may take 1013H-1023H or elect exemption. Some programs require credit in composition, and students should confer with their advisers before choosing exemption.

Fine Arts/Humanities (6 hours)
Courses presented in this area are drawn from the study of human thought, emotion, values, culture, and aesthetics. They are designed to develop the capacity for reflection, an appreciation of our own diverse culture and a tolerance of those foreign to us, and a heightened aesthetic and ethical sensibility. The courses are not performance-based, but offer students a basis for the gradual acquisition of broad cultural literacy.

Mathematics (3 hours)
Courses offered in this area are designed to develop the student’s ability to understand the diverse mathematical concepts that shape our increasingly technical culture. Core mathematics courses presuppose the ability to apply mathematical techniques at the level of high school algebra and geometry. The specific course(s) selected will depend upon each student’s curriculum, but no course below college algebra may be used to fulfill core requirements.

Science (8 hours)
A primary goal of these courses is to develop an appreciation of the basic principles that govern natural phenomena and the role of experiment and observation in revealing these principles. Students should acquire an understanding of the relationship between hypothesis, experiment, and theory, and develop the skills common to scientific inquiry, including the ability to frame hypotheses and defend conclusions based on the analysis of data. These courses are designed to prepare a student for informed citizenship by illustrating the importance of science and technology to the present and future quality of life and the ethical questions raised by scientific and technological advances.

Social Science (9 hours)
The purpose of the social science core is to introduce students to the breadth of inquiry in the social sciences—such as the study of ideas, the behavior of individuals, groups, institutions, and their interactions. The core should expose students to the history of and the challenges encountered in our complex, culturally diverse world.

American History and Civil Government (3 hours)
Under Arkansas law, no undergraduate degree may be granted to any student who has not passed a college course in American history and civil government. Courses offered by the University of Arkansas, any one of which will meet this requirement, are HIST 2003 History of the American People to 1877; HIST 2013 History of the American People, 1877 to Present; and PLSC 2003 American National Government.

Enrollment Requirement
To ensure the opportunity to engage with faculty and peers in their area of study at the University of Arkansas (UA), Fayetteville, students must fulfill the UA Enrollment Requirement (formerly the “Residence Requirement”):
1. Earn a minimum of 30 semester hours at the University of Arkansas, Fayetteville campus—this includes UA faculty-led study abroad classes, online/on-campus classes, and Global Campus courses; and all other courses paid towards Fayetteville campus tuition and fees;
2. These 30 semester hours are to be upper-division semester hours required for the completion of a degree program;
3. Additional hours in residence can be required for completing a minor;
4. Hours earned in another school or college at UA (Fayetteville) may be used to satisfy this requirement — with appeal of appropriate faculty curriculum committee;
5. Appeals to the standards identified in this policy should be made to the Academic Standards Committee.

Minimum Credits
All students awarded a baccalaureate degree must have a minimum of 124 credit hours. Individual programs may require additional hours. Courses not marked in the course description as eligible to be repeated for degree credit may be included in this total only once.

Minimum Grade-Point Average
No student will be allowed to graduate if the student has “D” grades in more than 25 percent of all classes that are earned at this institution and that are presented to meet the requirements for a degree. No student will be allowed to graduate if that student’s academic standing is other than good standing.

Application for Graduation
Students who plan to graduate must file an official application to do so. Applications should be filed for the term in which degree requirements will be completed. A graduation fee will be required at the time of application.

Other Graduation Requirements
Individual colleges and schools may have special graduation requirements, in addition to degree program requirements. Consult the college or school section in this catalog for statements of additional requirements.

Degree Program Requirements
A student’s degree program requirements are normally those specified in the catalog for the student’s first year of enrollment. However, students may choose to meet the program requirements specified in a catalog for a later year and, under some circumstances, students may be required to meet degree program requirements incorporated into the curriculum at a level beyond that at which the student is enrolled.

Students who transfer from institutions with articulation agreements with the University may also be allowed to meet the University program requirements in effect during their first year of enrollment in those institutions, subject to the time limits described below and the availability of course work. Students who transfer to a different degree program may be required to meet the program requirements specified in the catalog for the year of entry into that program. Students who are not enrolled for a period of two years or longer may be required to reenter under program requirements in the current catalog. Students who wish to be granted a degree on the basis
<table>
<thead>
<tr>
<th>University Core Courses (State Minimum Core)</th>
<th>Areas</th>
<th>Hours</th>
<th>University Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>6</td>
<td>ENGL 1013 Composition I ENGL 1023 Composition II</td>
<td></td>
</tr>
<tr>
<td>Mathematics¹</td>
<td>3</td>
<td>MATH 1203/1204 College Algebra or Any higher-level mathematics course required by major</td>
<td></td>
</tr>
<tr>
<td>Fine Arts, Humanities³ (Select 3 hours each from categories “a” and “b”)</td>
<td>6</td>
<td>a) Fine Arts: ARCH 1003 Basic Course in the Arts: Architecture Lecture ARHS 1003 Basic Course in the Arts: Art Lecture COMM 1003 Basic Course in the Arts: Film Lecture DANC 1003 Basic Course in the Arts: Movement and Dance DRAM 1003 Theater Appreciation LARC 1003 Basic Course in the Arts: The American Landscape MLIT 1003 Basic Course in the Arts: Music Lecture MLIT 1013 Music Lecture for Music Majors</td>
<td></td>
</tr>
<tr>
<td>b) Humanities: Any intermediate I foreign language⁴ ARCH 1013 Diversity and Design CLST 1003 Intro to Classical Studies: Greece CLST 1013 Intro to Classical Studies: Rome COMM 1233 Media, Community and Citizenship HUMN 1124H Honors Equilibrium of Cultures, 500-1600 HUMN 2003 Intro to Gender Studies HUMN 2124H Honors Twentieth Century Global Culture PHIL 2003 Intro to Philosophy PHIL 2103 Intro to Ethics PHIL 2203 Logic PHIL 3103 Ethics and the Professions WLIT 1113 World Literature I WLIT 1123 World Literature II</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Footnotes for the State Minimum Core:

1 Some students majoring in math, engineering, science and business may be required to take a higher math as part of the State Minimum Core.
2 Some students majoring in math, engineering, science, education and health-related professions may be required to take higher or specific science courses as part of the State Minimum Core.
3 Some students majoring in engineering may be required to take either six hours of humanities or social sciences at the junior/senior level or substitute an additional six hours of higher math and/or additional science as part of the State Minimum Core.
4 Typically numbered 2003. See Department of World Languages, Literatures and Cultures in the J. William Fulbright College of Arts and Sciences chapter.
5 Some students majoring in engineering may be required to take either six hours of humanities or social sciences at the junior/senior level or substitute an additional six hours of higher math and/or additional science as part of the State Minimum Core.
6 If not selected to meet the three hours of the U.S. History requirement.
of requirements specified in a catalog more than seven years old may be required to petition the college or school to be allowed to do so. Students are expected to keep themselves informed regarding program requirements and changes.

EIGHT-SEMESTER DEGREE COMPLETION POLICY

The University of Arkansas is committed to helping all of its students identify and achieve their educational goals. The many University of Arkansas programs of study and activities provide opportunities to students to follow varied career and learning paths and enjoy educational experiences of different kinds. Plans for degree completion are available in the Catalog of Studies, from colleges, schools, and departments, and at the University Web site. Academic advising services in each college and school assist students in making plans for their own degree completion and in carrying them out consistent with students’ abilities, circumstances, and preferences.

The Eight-Semester Degree Completion Program (DCP), makes it possible for qualified degree-seeking freshmen to express their intention -- and assume the associated obligations -- to complete identified bachelor’s degree programs of study in four academic years. The list of majors and degrees designed to be completed in eight semesters and for which the DCP is available is published in the Catalog of Studies. Colleges, schools and individual departments can provide this list as well. Before registering for their first semester of study, all freshmen entering the University must accept participation, decline participation, or acknowledge ineligibility for participation in the DCP by signing the Participation Document. New freshmen will be notified regarding how to view the Participation Document on-line and learn more about registering for a Degree Completion Program. A student’s participation or nonparticipation in the DCP will not affect scholarship eligibility.

Students who are admissible to the DCP and who choose to participate have the responsibility for meeting all requirements specified by the University and their degree completion plan and the responsibility for complying with the DCP policy. The University is responsible for providing academic support and for ensuring that students can complete university, program and course requirements within eight consecutive semesters. The University will also provide students with timely notifications to the student’s official University e-mail address regarding advising, registration, and other requirement completion information.

A student may choose at any time to discontinue participation in the DCP without penalty. Students are encouraged to discuss such choices with an authorized academic adviser for the program of study. Participation and subsequent withdrawal from the DCP will not jeopardize the student’s opportunity to complete the degree program, to do so in a timely manner, or to complete another degree program or major by fulfilling program requirements.

In some circumstances it may be in a student’s best interest to decline participation or withdraw from the DCP. Examples include students who are not prepared to choose a major before enrolling for the first semester and students who feel that a full semester class load of 15 or 16 hours will be too heavy given other responsibilities. Other students may plan to study abroad for a semester in an institution where the required courses are not offered or to participate in a semester-long internship program not included in the program plan. A decision or need to work or participate in certain time-intensive curricular and extra-curricular activities such as band and intercollegiate athletics may make it impossible to schedule all requirements in some programs. A student may be required to withdraw from the DCP as a result of illness or other personal circumstances that make it impossible to do his or her best work, continue as a full-time student, or complete requirements in the time available. There are also a number of acts and events that may or will cause the DCP agreement to be voided; these are identified below in the section “Student acts and other events that will or may void the degree completion plan agreement.”

Requirements for Admission to the Eight-Semester Degree Completion Program (DCP):

1. Participants must begin their program of study in the fall semester as first-time, full-time freshmen and must be committed to be full-time students able to enroll in and successfully complete at least 31-36 hours each academic year.

2. Participants must have chosen a major included in the DCP must meet all admission requirements for the chosen program of study including applicable program grade point average and other grade requirements, and must have been admitted to programs requiring formal program admission.

3. Participants must be qualified to begin enrollment in the fall semester without being required to take remedial courses in math, English, or reading or other course prerequisites to entry-level courses in the chosen program of study.

Requirements for Continuance and Completion of the Eight-Semester Degree Completion Program:

1. Students must follow exactly the degree completion plan for the chosen major and must meet all the specified requirements in their degree plan each semester unless an alternative is approved by an authorized academic adviser for their program or unless they have already met the requirement.

2. Students must be continuously enrolled in and successfully complete at least 31-36 semester credit hours of appropriate course work each academic year as outlined in their degree completion plan.

3. Students must make satisfactory academic progress as defined by the University and degree program and must maintain the grade point average required by the University and the program of study.

4. Students must monitor their own progress in meeting the requirements identified in their degree completion plan, consistent with the program plan.

5. Students must register for classes at the first/earliest assigned time during their designated registration period each semester for the following term. For courses required for graduation, students must accept any available course or class section that does not conflict with other required courses. Students should understand that special scheduling accommodations cannot be guaranteed for work or other activities including athletics and band.

Students must seek assistance from an authorized academic adviser for their chosen program of study if they are unable to identify or register for any course(s) required for that semester in their degree program. For situations in which an authorized academic adviser for the program cannot identify a required course for the student to take, the adviser must notify the department chair and dean for the student’s program of study that it has not been possible for the student to complete registration for a required course for the next semester of enrollment. Notification must be made in writing immediately following the unsuccessful attempt to register. Consistent with the terms of the degree completion program, the chairperson or dean will identify an alternate course, in writing, to fulfill graduation requirements or will provide an override to allow the student to enroll in the required course(s).

Students must complete registration no later than the last official day of class for the fall or spring term preceding the next term of enrollment, unless the identification of an appropriate course to complete the student’s registration is still in progress.

6. Students must have prior written approval by an authorized academic adviser before enrolling in any course at another institution (such as concurrent enrollment, enrollment during a summer term, or study abroad) if the student wishes to transfer the course and have the course included in the coursework submitted for the degree completion plan.

7. Students must confer with an authorized academic adviser for their program before withdrawing from a required course as such a withdrawal will void the DCP agreement.

8. Students must at all times maintain an accurate local address, and telephone number in official university records. Students may make changes to such information in the Student Information System Self Service component as needed and should make them immediately following any change. Students may also make changes by written notice to the Registrar.

9. Students must respond in a timely way to any official notice or message from an authorized academic adviser and to any official notice regarding registration, degree progress, financial obligations or aid, or any other university requirement.
10. Students must make timely application for all necessary financial assistance, consistent with deadlines.
11. Students must meet all University degree requirements (including formal application for graduation consistent with deadlines and requirements as established by the Registrar for the semester in which the student is scheduled for graduation).

**Student Acts and Other Events That Will or May Void the Degree Completion Plan Agreement:**
1. Withdrawing from (“dropping”) a required course
2. Receiving a failing grade in a required course or receiving a grade below that required by the program
3. Changing one’s major or degree program
4. Withdrawing from the University
5. Failure to meet any degree requirement(s) as specified and in the time specified
6. Unauthorized non-payment or delayed payment of any tuition or fees
7. Incurring a disciplinary action affecting the student’s enrollment
8. Failing to comply with any other requirement of the Eight-Semester Degree Completion Policy.

**Appeal Process**
A student may appeal the voiding of the DCP to the dean of the college or school in which the student is enrolled. The appeal process requires that the student submit a statement of the basis for the appeal to the dean in writing within 30 days following notification of the voiding of the program, with a copy to an authorized academic adviser for the program. The dean will notify the student and the adviser of the outcome of the appeal within 60 days after receiving the statement.

---

**GRADUATION RATES**

In accordance with the Student Right-To-Know and Campus Security Act of 1990, the following is a summary of the institution’s six-year graduation rates:

<table>
<thead>
<tr>
<th>Fall 2005 Graduating, Bachelor, Degree-Seeking Freshmen</th>
<th>Men</th>
<th>Women</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Graduates</td>
<td>733</td>
<td>838</td>
<td>1,571</td>
</tr>
<tr>
<td>Percent of Total</td>
<td>55%</td>
<td>63%</td>
<td>59%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall 2005 Graduating Student Athletes Who Received Athletically Related Aid</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>74%</td>
</tr>
<tr>
<td></td>
<td>53%</td>
</tr>
</tbody>
</table>

---

**TRANSFER OF CREDIT**

The following policies control the granting of credit for course work taken at other institutions:

1. Transfer credits are subject to a two-stage evaluation process. First, the eligibility of the hours for transfer is evaluated by the Office of the Registrar based upon decisions of appropriate faculty, the Arkansas Course Transfer System (http://acts.adhe.edu/studenttransfer.aspx), and the Transfer Course Equivalency Guide (https://waprd.uark.edu/web-apsregti/coursequiv/Main). Credits found to be eligible for general transfer may not count toward the minimum requirements for every degree at the University of Arkansas. The second step in the evaluation, performed by the academic dean’s office or department responsible for the program of study, determines which hours evaluated will satisfy degree program requirements.
2. Grades earned at other institutions are not calculated in the student’s grade-point average earned at the University.
3. General transfer credit is awarded for courses in which a grade of “C” or higher has been earned. Course work must be applicable to a baccalaureate degree; credit is not granted for course work that is remedial or technical in nature.
4. Students can petition to have up to six hours of “D” grades transfer for degree credit to the University of Arkansas. Students must have a 2.00 GPA on a 4.00 scale to be considered, and courses must meet core or elective requirements in the student’s degree program. Courses outside the degree program and courses in the major cannot be considered for transfer. The Admissions and Appellate Committee makes all decisions regarding “D” transfers. Petitions can be obtained from the Office of the Registrar.
5. In the case of course work taken at institutions not fully accredited by a regional accrediting agency, transfer credit may be denied altogether or may be granted provisionally subject to successful completion of specified courses at the University. Normally, credit is provisionally granted only if the institution is a candidate for regional accreditation.
6. No more than 68 semester hours of lower-division (freshman- or sophomore-level) course work will be used for the student’s degree. There is no limit placed upon the number of upper-division (junior- or senior-level) credit hours that may be awarded in general transfer, but a student must complete at least 30 upper division UA Fayetteville hours to meet graduation requirements (see Requirements for Graduation in this catalog). Please also refer to the appropriate college section of this catalog for any additional transfer policies that may be specific to your anticipated degree program.
7. The State Minimum Core (SMC): Act 98 of 1989 requires each institution of higher learning in Arkansas to identify a minimum core of general education courses that shall be fully transferable between state-supported institutions. Under guidelines from the State Board of Higher Education, the SMC consists of 35 hours distributed among the following education areas: English, U.S. history or government, mathematics, science, fine arts and humanities, and social sciences. Students transferring credit with grades of “C” or better from the approved SMC of another state-supported institution in Arkansas may expect to have all these hours applied toward their degree at the University of Arkansas.
8. Transfer credit policy under Arkansas Act 182 from 2009 requires a four-year public institution of higher education in Arkansas to accept all credits earned from students earning an Associate of Arts, Associate of Science or Associate of Arts in Teaching degree from a state-supported public institution in Arkansas.

Major stipulations of Act 182 are outlined below:
- The transfer degree contains the curriculum that is approved by the Arkansas Higher Education Coordinating Board.
- The four-year public institution of higher education is to admit a transfer student to junior status in a baccalaureate degree program at the four-year public institution of higher education.
- A four-year public institution of higher education receiving a transfer student shall not require additional lower division coursework if the additional course is considered a general education lower division course.
- The receiving four-year public institution of higher education may only require the additional lower division course if the additional lower division course is:
  1. a prerequisite for courses in the transfer student’s baccalaureate degree program;
  2. a discipline-specific course that is required by the transfer student’s baccalaureate degree program and the student has not completed a course at the two-year public institution of higher education that is comparable to the discipline-specific course at the four-year public institution of higher education in the Arkansas Course Transfer System;
  3. a requirement of an independent licensing or accrediting body
- Act 182 does not remove the requirement that a transfer student must meet total baccalaureate degree program credit hour and course requirements in order to be eligible for a baccalaureate degree.
- The receiving four-year public institution of higher education shall
determine whether to accept a grade of "D" for academic course credit for a student transferring from a two-year public institution of higher.

Students should be prepared to submit course descriptions and syllabi of transfer work if there is any question concerning acceptance of credit toward a degree program. The University reserves the right to revise credit for advanced standing after the student has been in residence.

Please refer to the appropriate college or school section of this catalog for additional information concerning acceptance into specific degree programs.

Arkansas Course Transfer System (ACTS)

The Arkansas Course Transfer System (ACTS) contains information about the transferability of courses within Arkansas public colleges and universities. Students are guaranteed the transfer of applicable credits and the equitable treatment in the application of credits for the admissions and degree requirements. Course transferability is not guaranteed for courses listed in ACTS as No Comparable Course. ACTS may be accessed on the Internet by going to http://acts.adhe.edu/studenttransfer.aspx.

Military Transfer Credit

The University of Arkansas accepts transfer credit based upon completed military training as evaluated by the American Council of Education (ACE) guidelines and recommendations. The evaluation must be presented to the University on an official transcript from ACE. Equivalencies for military credit as recommended by ACE are evaluated by departmental faculty and may not be exactly the same as ACE. University of Arkansas equivalencies for ACE credit are displayed on the Web site of the Office of the Registrar in the Transfer Credit section. Students may elect to receive 6 hours of general military science credit for basic training as evaluated by presentation of the military DD214. Officer training would qualify the student for 6 additional hours of general military science credit. The same training may not be presented for both general military science credit and ACE credit.

More information on transfer credit can be found online by going to http://www.uark.edu/registrar and clicking on Transfer Credit.

ADDITIONAL BACHELOR'S DEGREE

A person with a bachelor's degree from the University of Arkansas, or from any other institution, may not receive another bachelor's degree without completing in residence at least 30 hours of additional, not necessarily subsequent, courses selected from the courses leading to a degree for which the person is a candidate.

More than 30 hours of course work may be required. In addition to the college or school requirements, the candidate must also meet all University requirements as stated in the catalog, including graduation and core requirements, except when course work for the first degree satisfies requirements for the second.

ANNUAL NOTICE OF STUDENT RIGHTS UNDER THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are as follows:

1. The right to inspect and review the student's education records, with some exceptions under the Act, within 45 days of the day the University receives a request for access. Students should submit the request in writing to the Registrar's Office. The appendix to University-wide Administrative Memorandum 515.1 provides a list of the types and locations of education records, the custodian of those records, and copying fees for each individual campus. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading. Students should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. A sample form, which may be used in making this request, is contained in the appendix to University-wide Administrative Memorandum 515.1.

If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing and is also contained in the University-wide Administrative Memorandum 515.1.

3. The right to withhold consent of disclosure of directory information, defined as the following information: the student's name; address; telephone number; date and place of birth; religious preference; major field of study; classification by year; number of hours in which enrolled and number completed; parents' or spouse's names and addresses; marital status; participation in officially recognized activities and sports; weight and height of members of athletic teams; dates of attendance; including matriculation and withdrawal dates; degrees, scholarships, honors, and awards received, including type and date granted; most recent previous education agency or institution attended; and photograph.

This information will be subject to public disclosure unless the student restricts such information through the appropriate settings in ISIS, the student information system, or informs the Office of the Registrar in writing that he or she does not want this information designated as directory information.

4. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record to fulfill his or her professional responsibility.

Upon request, the University also discloses education records without consent to officials for another school in which a student seeks or intends to enroll.

5. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is as follows:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Avenue, SW
   Washington DC 20202-4605

6. University-wide Administrative Memorandum 515.1 is available on request in the main library on campus.

PHOTOGRAPHIC AND VIDEO IMAGES

The University is proud to publish and display photographic and video images of UA students, their activities and accomplishments. Any student who does not wish to be represented in such photographic and video images by the University should choose to withhold photos on the FERPA option on the University's student information system.

Ph.D.
WAIVER OF ACADEMIC POLICIES

The Academic Standards Committee, composed of faculty and students, serves as a referral body for matters of probation, suspension, dismissal, and other rules and regulations related to academic progress and graduation. Petitions for waiver of academic rules and information on the petitioning process may be obtained on the Office of the Registrar’s Web site. Petitioners should note petitioning deadlines.

STUDENT ACADEMIC APPEALS

Students are first encouraged to resolve academic conflicts and complaints informally through their department or through the assistance of the Office of Student Mediation and Conflict Resolution, which can provide objective and confidential mediation. If an informal resolution cannot be reached there are two kinds of procedures for undergraduate students to pursue with complaints of an academic nature. Refer to the Student Handbook for appeals structures for other grievances.

Grade Appeal Structure for Undergraduate Students

If a student questions the fairness or accuracy of a grade, there is recourse through a student grade appeal structure. Disagreements shall be heard that allege the instructor’s policy was not applied consistently to all students, differed substantially from the announced policy, or that a policy was not announced. All grievances concerning course grades must be filed within one calendar year of the end of the term in which the grade that is being appealed was assigned. The procedures are:

1. The student should first discuss the matter with the instructor involved, doing so as soon as possible after receiving the grade. The instructor should be willing to listen, to provide explanation, and to be receptive to changing the grade if the student provides convincing argument for doing so. The student’s questions may be answered satisfactorily during this discussion.

2. If the student chooses to pursue the grievance, the student shall take the appeal in written form to the appropriate department chairperson. That person, if she or he believes the complaint may have merit, will discuss it with the instructor.

3. If the matter remains unresolved, it will be referred to an ad hoc committee composed of the entire faculty of the instructor’s department. The committee will examine available written information on the dispute, will be available for meetings with the student and with the instructor, and will meet with others as it sees fit.

4. If the faculty committee, through its inquiries and deliberations, determines that the grade should be changed, it will request that the instructor make the change and provide the instructor with a written explanation. Should the instructor decline, he or she must provide an explanation for refusing.

5. If the faculty committee, after considering the instructor’s explanation, concludes it would be unjust to allow the original grade to stand, it may then recommend to the department chairperson that the grade be changed. That individual will provide the instructor with a copy of the recommendation and will ask the instructor to implement it. If the instructor continues to decline, the chairperson is then obligated to change the grade, notifying the instructor and the student of this action. Only the chairperson has the authority to effect a grade change over the objection of the instructor who assigned the original grade, and only after the foregoing procedures have been followed. If the faculty committee determines that the grade should not be changed, it should communicate this conclusion to the student, the faculty member, and the chair.

ADVANCED-STANDING PROGRAMS

Credit by Examination

There are two ways a student enrolled at the University of Arkansas, Fayetteville,
may establish undergraduate credit by examination in courses offered by the University: either through the University of Arkansas Credit by Examination Program (see the next section), or through approved national testing programs, such as the College Level Examination Program (CLEP), the Advanced Placement Program (AP), or the International Baccalaureate Program (IB).

Credit established by examination must be evaluated in terms of the specific program the student wishes to pursue. The decision regarding the appropriate application of such credit to a degree program will be made in each college or school. Credit established by examination will be applied to a degree program in the same manner as credit established in any other way. If credit is earned by examination, the mark of CR will be entered in the student’s record. Grades are not assigned.

In certain instances, however, instead of actually receiving credit in semester hours, a student may receive advanced standing and be authorized to enroll for advanced courses in the subject matter area.

Credit by examination may not be used to satisfy minimum residency requirements as established by each college or school. Credit by examination is recorded only for students currently enrolled at the University of Arkansas, Fayetteville.

**University of Arkansas Program**

The following conditions apply to the departmental programs for credit by examination:

1. The student must apply for such examination using forms available in the academic dean or department office. Permission to take the examination must be obtained from the faculty of the department offering the course. The faculty of each department is responsible for designating the courses in that department that may be challenged by examination.

2. The appropriate department or college offering the course will designate and administer the examination.

3. A passing grade on the examination must be “B” or above. A second trial for credit by examination in that course will not be permitted.

4. A $25 credit by examination fee will be assessed per course.

**National Testing Programs**

When credit by a national examination is granted, the student’s academic record will list the score used as a basis for credit as well as the type of examination used to establish credit, such as CLEP subject examination or general examination, AP examination or IB examination.

Credit is awarded on the basis of official score reports, which must be sent by the national testing service directly to the Office of the Registrar, 146 Silas H. Hunt Hall, University of Arkansas, Fayetteville, AR 72701. These materials may be requested from International Baccalaureate North America, 200 Madison Avenue, Suite 207, New York, NY 10016, telephone: 212-696-4464.

Credit is awarded on the basis of official score reports, which must be sent by the national testing service directly to the Office of the Registrar, 146 Silas H. Hunt Hall, University of Arkansas, Fayetteville, AR 72701. These materials may be requested from International Baccalaureate North America, 200 Madison Avenue, Suite 207, New York, NY 10016, telephone: 212-696-4464.

Approval has been granted by the appropriate governing body, upon recommendation of the academic department, to award credit and/or placement for students who present qualifying scores in the AP courses listed on the next page.

**Advanced Placement Program (AP) – see chart on opposite page**

The Advanced Placement (AP) Program of the College Entrance Examination Board gives students the opportunity to pursue college-level studies while still in high school and, with an appropriate score on an AP exam, to receive advanced placement and/or credit upon entering the University. The AP examinations are offered annually by high schools that participate in this program. The appropriate UA governing body, upon recommendation of the academic department, has authorized credit and/or placement for students who present qualifying scores in the AP courses listed on the next page.

**International Baccalaureate Program (IB)**

The International Baccalaureate (IB) program is a comprehensive and rigorous two-year high school curriculum offered in the United States and in 72 countries around the world. The IB program provides students with a balanced education, facilitates geographic and cultural mobility, and promotes international understanding through a shared academic experience. The IB program gives students the opportunity to pursue college-level studies while in upper secondary school and to receive credit for final examinations upon entering the University. The IB examinations are offered annually, usually in May, by high schools participating in this program. Students seeking credit for examinations must request that a final, official IB transcript of certificate or diploma results be sent by mail to the Office of the Registrar, 146 Silas H. Hunt Hall, University of Arkansas, Fayetteville AR 72701. These materials may be requested from International Baccalaureate North America, 200 Madison Avenue, Suite 207, New York, NY 10016, telephone: 212-696-4464.

Approval has been granted by appropriate academic departments to award credit in the following courses. The minimum scores were established by the departments of the subject areas concerned.

<table>
<thead>
<tr>
<th>INTERNATIONAL BACCALAUREATE (IB)</th>
<th>International Course</th>
<th>UA Course</th>
<th>Score (Higher Level)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>ANTH 1023</td>
<td></td>
<td>4-7 HL</td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL 1543/1541L</td>
<td>BIOL 1543H/1541M</td>
<td>4.5 HL 6.7 HL</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM 1103/1101L</td>
<td>CHEM 1123/1121L</td>
<td>5-7 HL</td>
</tr>
<tr>
<td>Computer Science</td>
<td>CSCE 2014</td>
<td></td>
<td>4-7 HL</td>
</tr>
<tr>
<td>Economics</td>
<td>ECON 2013 &amp; ECON 2023</td>
<td></td>
<td>5-7 HL</td>
</tr>
<tr>
<td>English</td>
<td>ENGL 1013</td>
<td>ENGL 1023</td>
<td>5-7 HL 6.7 HL</td>
</tr>
<tr>
<td>Geography</td>
<td>GEOG 1123</td>
<td></td>
<td>5-7 HL</td>
</tr>
<tr>
<td>History (U.S.)</td>
<td>HIST 2003 or 2013</td>
<td>HIST 2003 &amp; 2013</td>
<td>4 HL 5-7 HL</td>
</tr>
<tr>
<td>History (World)</td>
<td>HIST 1113 &amp; 1123</td>
<td>HIST 1113H &amp; 1123H</td>
<td>4.5 HL 6.7 HL</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Up to 8 hours possible (To be determined by the Math Department)</td>
<td>5-7 HL</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>PHIL 2003</td>
<td>PHIL 2003H</td>
<td>4.5 HL 6.7 HL</td>
</tr>
<tr>
<td>Physics</td>
<td>PHYS 2013 &amp; 2011L &amp; PHYS 2033 &amp; 2031L</td>
<td>4.5 HL 6.7 HL</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>PSYC 2003</td>
<td></td>
<td>4-7 HL</td>
</tr>
<tr>
<td>AP Examination</td>
<td>UA Course</td>
<td>Minimum Score</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>Art History</td>
<td>ARHS 1003</td>
<td>3C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ARHS 1003H or ARHS 2913</td>
<td>4C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ARHS 1003H or ARHS 2913 &amp; ARHS 2923</td>
<td>5C</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL 1543H/1541M</td>
<td>3P</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 1543/1541L</td>
<td>4C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 1543H/1541M</td>
<td>5C</td>
<td></td>
</tr>
<tr>
<td>Calculus AB</td>
<td>MATH 2554</td>
<td>3C, 4C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 2554H</td>
<td>5C</td>
<td></td>
</tr>
<tr>
<td>Calculus BC</td>
<td>MATH 2554 &amp; MATH 2564</td>
<td>3C, 4C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 2554H &amp; MATH 2564H</td>
<td>5C</td>
<td></td>
</tr>
<tr>
<td>AB Subscore</td>
<td>MATH 2554</td>
<td>4C</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM 1103/1101L &amp; CHEM 1123/1121L</td>
<td>4C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 1103/1101L &amp; CHEM 1123/1121M</td>
<td>5C</td>
<td></td>
</tr>
<tr>
<td>Literature or English</td>
<td>ENGL 1023</td>
<td>3E, 4C, 5C</td>
<td></td>
</tr>
<tr>
<td>Language and Compo</td>
<td>ENGL 1013</td>
<td>3E, 4C, 5C</td>
<td></td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>ENSC 1003</td>
<td>3C</td>
<td></td>
</tr>
<tr>
<td>European History</td>
<td>HIST 1123</td>
<td>4C</td>
<td></td>
</tr>
<tr>
<td>French Language</td>
<td>FREN 1013 &amp; 2003</td>
<td>3C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FREN 1013, 2013 &amp; 2013</td>
<td>4C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FREN 1013, 2003, 2013, &amp; 3003</td>
<td>5C</td>
<td></td>
</tr>
<tr>
<td>French Literature</td>
<td>FREN 3103</td>
<td>5C</td>
<td></td>
</tr>
<tr>
<td>German Language</td>
<td>GERM 1013 &amp; 2003</td>
<td>3C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GERM 1013, 2003 &amp; 2013</td>
<td>4C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GERM 1013, 2003, 2013, &amp; 3003</td>
<td>5C</td>
<td></td>
</tr>
<tr>
<td>Government and Politics: Comparative</td>
<td>PLSC 2013</td>
<td>3C</td>
<td></td>
</tr>
<tr>
<td>Government and Politics: U.S.</td>
<td>PLSC 2003 H</td>
<td>3C, 4C, 5C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GERM 1013, 2003, 2013, &amp; 3003</td>
<td>5C</td>
<td></td>
</tr>
</tbody>
</table>

Symbols for placement and credit: P = placement; Pq = qualified placement (student may be placed in an advanced course, with credit awarded for prerequisites upon satisfactory completion, subject to departmental review); C = credit; Cq = qualified credit (placement and credit subject to departmental review).

1 Credit will be awarded upon satisfactory completion of a junior or senior-level economic course.

2 Students must pass a departmental test to receive credit.

3 To receive credit for courses preceding the course for which AP credit has been granted, students must enroll in and complete with a grade of “C” or higher, that course which follows in sequence the course for which AP credit was granted.

4 At most, 3 hours credit allowed for AP Statistics.
Academic Resources and Facilities

ENHANCED LEARNING CENTER

The Enhanced Learning Center is designed to provide assistance to all University of Arkansas students in meeting their academic goals here and beyond. The center's goal is to help students succeed in a variety of locations and formats. For all services, see elc.uark.edu and qwc.uark.edu

The Enhanced Learning Center has two primary locations: The E.L.C., which is on the Garden Level of Gregson Hall and focuses on math, the sciences, world languages, and the social sciences; and the Quality Writing Center, which is located in 316 Kimpel Hall and focuses on both undergraduate- and graduate-level writing assistance.


Contact the Enhanced Learning Center by phone at 479-575-2885 or visit the center's website at http://elc.uark.edu/

INFORMATION TECHNOLOGY SERVICES

University of Arkansas IT Services provides information technology leadership and support for academics, research, and public services. A variety of services are hosted by IT Services, including email, the campus network, wireless access, technical support, computer labs, the online student information system, and the learning management system. Student-centered technology services are funded by the Student Technology Fee, assessed by the Associated Student Government and managed by IT Services.

The campus network offers two wireless options for laptops and other mobile devices. UA Secure is an encrypted, secure network for UARK users, providing full access to all online services. UA Wireless is a guest network designed to provide anyone with Internet access on campus. For security, some services are blocked when connecting with UA Wireless.

Email service for students at the University of Arkansas is provided by Google. Students can configure various email applications to connect to email.uark.edu, including Outlook, OS X Mail, smartphone apps, and open-source applications. New or returning students can refer to the Get Started section of http://its.uark.edu for information on activating a UARK account and setting up a personal computer for access to email and wireless.

General Access Computing Labs (GACLs) offer over 300 Windows and Mac computers for use by UARK users. Laptops are open during day and evening hours, including weekends, and some are open 24/7. GACLs are located in the Arkansas Union, Mullins Library, J.B. Hunt Center for Academic Excellence, Administrative Services Building (ADSB), and Northwest Quad. PrintSmart, the GACL printing system for students, provides a printing quota equivalent to 700 single-sided black and white pages per student per semester.

Laptops with GACL software installed are available for checkout along with digital cameras, video recorders, and microphones, to students with a University ID at the Student Technology Center in the Arkansas Union. Laptops are also available for checkout at Mullins Library. Students can also work from anywhere 24/7 using VLab at http://vlab.uark.edu, a virtual Windows 7 desktop providing real time access to GACL software from their own computers.

The Student Technology Center houses the Gaming Studio, the Digital Media Lab, a tech lounge, and a team room. Students can receive individual tutoring and technical support for multimedia projects working on a number of high-end digital project workstations with a wide range of multimedia software packages in the Digital Media Lab or meet with friends for work or play in the tech lounge or Gaming Studio.

The Faculty Technology Center in Gibson Annex assists faculty in finding and using effective technological tools to enhance classroom learning. The Center's staff works with faculty to support classroom initiatives that involve students using technology. The university's learning management system, Blackboard Learn, is supported by the Center. Other systems, such as Blackboard Collaborate and Echo360, integrate with Blackboard Learn for collaboration, communication, and lecture capture. Technical support for Blackboard Learn, Blackboard Collaborate, and Echo360 is available through the Center.

The Help Desk provides technical support to students, faculty, and staff via telephone at 575-2905, email at helpdesk@uark.edu, or through the online AskIT system at http://askit.uark.edu. A satellite Help Desk, providing one-on-one technical support and phone support, is located in the Arkansas Union near the entrance to the General Access Computing Lab.

Symantec AntiVirus software downloads are available free of charge from the IT Services website to all university users. Installation is required for all computers accessing the university network, and students living in residence halls are required to install Symantec to gain access to ResNet, the university's residence hall network. See the Get Started section of http://its.uark.edu to get Symantec.

A variety of collaborative technologies are available through IT Services, providing members of the university community with the tools to collaborate in and out of the classroom, on campus, and around the globe, including:

• UA Chat offers instant messaging services between UARK users, as well as
The overarching goal of the University of Arkansas Student Support Services program is to empower students, assist them in achieving academic excellence, and see them through to graduation.

Student Support Services is a department in Diversity Affairs. The office is located on the Garden Level of Gregson Hall. For more details, call Student Support Services at 479-575-3546 or visit the website at http://sss.uark.edu/.

QUALITY WRITING CENTER

The Quality Writing Center provides face-to-face and online tutorials for undergraduate and graduate students who want to improve their writing. Clients make appointments via the center’s web-based scheduling system (http://qwc.uark.edu). The main facility is in 316 Kimpel Hall, and a satellite center is located on the Mullins Library ground floor.

Graduate tutors help clients with any writing project. The center’s staff of undergraduate peer tutors assist students with freshman composition assignments.

Quality Writing Center tutors take a non-directive approach, allowing students to maintain ownership of their writing and to control the important editorial decisions that improve their drafts. The tutors provide assistance to students at any stage of the writing process: brainstorming, pre-writing, outlining, drafting, and revising.

The center’s website at http://qwc.uark.edu has 40 handouts covering a wide variety of composition and grammar issues.

TESTING SERVICES

Testing Services is charged with the responsibility of administering standardized academic tests at the University of Arkansas. The office administers such national tests as the ACT Assessment, the Law School Admission Test (LSAT), the Graduate Management Admission Test (GMAT), the Graduate Record Examination (GRE), and CLEP exams in addition to others throughout the year. National testing companies determine testing dates and deadlines. Testing Services also offers a number of institutional tests such as the Test of English as a Foreign Language (TOEFL) and the Spoken Language Proficiency Test (SLPT). These tests are scheduled at various times as demand dictates. Test fees vary depending on the test.

To obtain a registration bulletin or information about exam dates and deadlines, please stop by 700 Hotz Hall or call 479-575-3948.

UNIVERSITY LIBRARIES

The library system of the University of Arkansas, Fayetteville, is composed of the David W. Mullins Library, the main research facility on campus, and four branch libraries:

- The Robert A. and Vivian Young Law Library
- The Fine Arts Library
- The Chemistry and Biochemistry Library
- The Physics Library

The spacious Helen Robson Walton Reading Room is the Libraries’ most popular quiet study area, and group study rooms are also available. More than 200 reference databases and thousands of electronic journals are accessible from anywhere with a University ID. Reference librarians assist users in locating and using library resources. Students may send questions by e-mail, telephone, or 24/7 chat, and can schedule a one-on-one session with a librarian for more extensive research questions. Reference librarians also conduct orientation sessions on research methods throughout the semester. Students may also visit the tutors from the Quality Writing Center and the Enhanced Learning Center on site in Mullins Library Sunday through Thursday. With more than 1.9 million volumes and 27,000 journal subscriptions, students will find plenty of research material for every subject. Other resources in the collections include several thousand maps, manuscripts, and more than 33,000 audio and visual materi-
Academic Resources and Facilities

The Performing Arts and Media Department offers a wide range of resources, including music scores, recordings, and movies, that you can hear or view in the library using wireless access. Visit the Libraries' Web page at http://libinfo.uark.edu to learn more about services and collections or access the My Library function that allows users to check library records, renew books, request holds and save catalog searches. Items not owned by the University Libraries may be obtained through inter-library loan by completing the online registration and request forms. Requested items in electronic format will be sent directly to desktops, usually within 24 hours; physical items will be held for pickup at the main service desk on the Lobby Level.

The University Libraries have had official United States government depository status since 1907. The Federal Depository Library Program provides free public access to U.S. government information by distributing information products from Federal agencies to depository libraries throughout the nation. The Government Documents Department has also been a depository for Arkansas state publications since 1993. The University Libraries’ map collection and GIS (Geographic Information Systems) program, including a public GIS workstation equipped with ArcGIS Desktop Suite, are available.

In Special Collections, students can read rare books from around the world, consult the largest book collection related to Arkansas, handle historic letters and diaries, magazines, and old photographs related to Arkansas, as well as watch old black and white films made in or about the state. A number of digital collections can be accessed online through the Special Collections' website at http://digitalcollections.uark.edu/

For information concerning collections and services, please inquire at 479-575-4104. For any other library matter, please contact the Dean's Office at 479-575-6702.

UPWARD BOUND PROGRAMS

Upward Bound, Upward Bound Academy for Math and Science, and Veterans Upward Bound

Upward Bound and Upward Bound Math and Science are early intervention programs that help low-income and potential first-generation college students prepare for higher education. These programs bring high school students in grades 9 – 12 to the University of Arkansas campus on weekends and during the summer to receive instruction in mathematics, laboratory sciences, composition, literature, and foreign languages. The programs also provide academic and social support through tutoring, counseling, mentoring, cultural enrichment, financial literacy, field trips, college planning, and financial aid assistance. For students just completing their senior year of high school, Upward Bound provides a summer residential bridge program that enables participants to earn up to six hours of college credit.

Veterans Upward Bound is designed to identify and serve the unique needs of veterans who have the academic potential and desire to enter and succeed in a program of higher education. Eligible veterans must have completed a minimum of 180 days of active duty in the military or Coast Guard and hold any discharge other than dishonorable. Services include tutoring; guidance counseling; assistance in filing financial aid and VA benefit forms; academic/career advisement; test preparation for entrance exams; and courses in English, Spanish, math, science, and computer technology. Courses are offered days and evenings each semester. Funding is provided through grants from the U.S. Department of Education.
University Centers and Research Units

Research programs are the means by which the University contributes to the generation as well as to the preservation and dissemination of knowledge. With nationally recognized programs in many areas and funding from government, industry, and other private sources, the research effort of the University is strong and diversified and provides special learning opportunities for students as discoveries are made.

In addition to the extensive work performed by faculty through individual and team efforts in academic departments, special programs of research are conducted by the University divisions described below.

Graduate students are likely to be involved in research conducted by these research units, but the university encourages undergraduates as well to pursue research in their areas of academic interest. Students who wish to engage in research of any kind should seek the guidance of their advisers and professors to identify research teams and projects. In addition to the extensive work performed by faculty through individual and team efforts in academic departments, special programs of research are conducted by faculty members and staff in many associated University research centers. The University invites students to learn more about these centers and the research opportunities they offer by visiting the Web sites or by contacting the individuals listed below.

AGRICULTURAL EXPERIMENT STATION

http://aaes.uark.edu/
Richard A. Roeder, associate director
AFLS E108
479-575-2120

The Arkansas Agricultural Experiment Station, a statewide unit of the UA Division of Agriculture, conducts scientific research on the dynamic biological, environmental, economic, and social systems involved in the production, processing, marketing, and utilization of food and fiber, community development, and family studies.

The experiment station is one of the most comprehensive research organizations in Arkansas, with a faculty of approximately 200 doctoral-level scientists. It is an essential part of the research and technology infrastructure that supports Arkansas agriculture and the food and fiber sector.

Experiment station research is conducted in agricultural and environmental sciences, marketing and economics, social issues affecting families and rural communities, nutrition, microbiology, genetics, molecular biology, and other dynamic scientific disciplines.

Many experiment station scientists also are on the teaching faculty of the Dale Bumpers College of Agricultural, Food and Life Sciences. The result is a wealth of opportunity for students to study and work with some of the nation's most respected scientists. Graduate students work on master's thesis and doctoral dissertation research projects as part of a team of experiment station scientists in modern laboratories, greenhouses, and field research facilities.

Experiment station research is closely coordinated with the Arkansas Cooperative Extension Service. Together, they comprise the statewide UA Division of Agriculture.

The Vice President for agriculture heads the Division of Agriculture for the UA system. The Associate Vice President - extension provides leadership to the cooperative extension service and reports directly to the Vice President for agriculture. The Dean of the Dale Bumpers College of Agricultural, Food and Life Sciences also serves as the Associate Vice President - academic affairs. The Associate Vice President - research also provides leadership for the agricultural experiment station and reports directly to the Vice President for agriculture for agricultural research programs. The Associate Vice President - academic programs reports primarily to the Provost/Vice Chancellor for Academic Affairs for instructional programs and also reports to the Vice President for agriculture.

The mission of the Division of Agriculture, through the combined efforts of the Experiment Station and Extension Service, is to provide new knowledge to strengthen the state's food and fiber sector; assure a safe food supply; conserve natural resources and protect the environment; and assist in the economic and social development of communities, families, and individuals, particularly in the rural areas of the state.

APPLIED SUSTAINABILITY CENTER

http://asc.uark.edu/
Jon Johnson, director
479-575-3556

The Applied Sustainability Center in the Sam M. Walton College of Business has a mission to coordinate research and education efforts across the campus with the aim of meeting current demands without compromising the needs of future generations. Some existing research areas are in agile agriculture, life cycle assessment, and reducing the carbon footprint of commercial products. Sustainability projects are undertaken in collaboration with a broad spectrum of businesses, governmental and not-for-profit organizations and academic partners.

ARKANSAS ARCHEOLOGICAL SURVEY

http://www.uark.edu/campus-resources/archinfo/
Thomas Green, director
ARAS 147
479-575-3556
archinfo@cavern.uark.edu

The Arkansas Archeological Survey is a research and public service organization charged by the legislature with statewide responsibility for conserving and investigating the state's archeological heritage and with making information on this rich heritage available to all.

To this end it has an extensive publication and public relations program. With a staff of 40 (approximately half of whom are professional archeologists), it is recognized as one of the most effective state-supported archeological research organizations in the country. The survey's coordinating office on the Fayetteville campus consists of the director, the state archeologist, computer services, editorial, graphics, and other support staff. There are also several research archeologists who carry out archeological
investigations under contracts as required by law to protect the state's archeological resources.

There are station archeologists at all 10 research stations around the state, including the Fayetteville campus, who are available for graduate guidance. The survey works closely with the University's Department of Anthropology in training students, cooperates with the state historic preservation officer and other state and federal agencies, and trains and assists citizen groups interested in archeological conservation.

ARKANSAS BIOTECHNOLOGY CENTER

The Arkansas Biotechnology Center is home for the University of Arkansas Herbarium. The center houses food safety research efforts of the Department of Food Science as well as the Agricultural Research Services Laboratories and Offices. The center also accommodates the curation laboratory and offices for the university collections. The coordinator of the Arkansas Biotechnology Center is Dr. James Rankin, Ozark Hall 118, 479-575-2470.

ARKANSAS CENTER FOR SPACE AND PLANETARY SCIENCES

http://spacecenter.uark.edu/
William Oliver, director
MUSE 202
479-575-7625
csvaps@uark.edu

The Arkansas Center for Space and Planetary Sciences is a research institute of the University of Arkansas, created by faculty from six departments, including Biological Sciences, Chemical Engineering, Chemistry and Biochemistry, Electrical Engineering, Geosciences, Mechanical Engineering, and Physics. Those departments, representing the J. William Fulbright College of Arts and Sciences and the College of Engineering, work closely with the Graduate School and the Honors College.

The center operates world-class research facilities and cutting-edge research projects. It houses the only university-based, large-scale planetary simulation chamber in the country along with major facilities for the analysis of extraterrestrial samples. Major research interests include the analysis of returned samples from space, the nature of Mars, and instrumentation for use in space. The center also operates a number of programs of interest to the university community, grade school teachers and students, and the public.

The space center administers master's and doctoral degree programs in space and planetary science. These provide a unique integrative interdisciplinary education and research training based on a suite of core courses spread across the departments and specialist courses appropriate to the student's specific interests. Professional development in communications, policy, and ethics and space policy is also included. Such training gives graduates a competitive edge in today's space and planetary job market.

Additionally, the Departments of Biological Sciences, Geosciences and Physics offer space and planetary science as an option in their own graduate programs. Admission procedures are outlined on the space center Web site along with detailed information about the programs, the research areas, and current research projects.

ARKANSAS COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT

http://new-www3.uark.edu/biscweb/Coop/home/coophome.htm
David Kremetz, unit leader
SCEN 632
479-575-6709
coopunit@uark.edu

The Coop Unit is a cooperative venture among the U.S. Geological Survey, Arkansas Game and Fish Commission, the University of Arkansas Department of Biological Sciences, and the Wildlife Management Institute. The Arkansas Coop Unit was established in 1988 and is part of a network of cooperative fish and wildlife research units that exist in 43 state and land-grant colleges across the United States.

The purpose of the Coop Unit program is to conduct applied and basic wildlife and fish research, to train graduate students in research and management methods, and to participate in graduate education and technical assistance. The three unit personnel are federal employees stationed on the University of Arkansas campus.

ARKANSAS HIGH PERFORMANCE COMPUTING CENTER

http://hpc.uark.edu/
Amy Apon, director
479-575-6794

The Arkansas High Performance Computing Center is a campuswide provider of supercomputing resources for research by students and faculty. The Star of Arkansas became operational in June 2008 with partial funding from the National Science Foundation. At that time, Star ranked 339 on the list of the world's 500 fastest supercomputers with a sustained performance of 10.75 teraflops (trillions of floating point operations per second). The Center supports a full breadth of research applications including computational condensed matter physics, computational chemistry, and nanoscale material behavior. The Center also provided educational experiences for students seeking experience in a parallel computing environment.

ARKANSAS HOUSEHOLD RESEARCH PANEL

The Arkansas Household Research Panel (AHRP) is a continuing project of the Department of Marketing and Logistics. AHRP consists of several hundred Arkansas households that respond to quarterly questionnaires. The AHRP has been used for academic, student, and business-related research. The panel's funding comes from the professional fees that are generated.

ARKANSAS LEADERSHIP ACADEMY

http://www.arkansasleadershipacademy.org/
Debbie Davis, director
WAAX 300
479-575-3030

The Arkansas Leadership Academy in the College of Education and Health Professions is a model program that prepares leaders for the classroom and the board room, develops accountability to communities, and facilitates the creation of results-driven educational environments. The academy supports reform of the educational system and provides direct services to school districts through district support activities or strategic leadership institutes. Academy graduates become part of a statewide network that pursues educational reform. The network includes representatives from business, industry, state government, the public schools, and higher education. The academy is governed by partners from higher education institutions, education service cooperatives, professional education organizations, state education agencies, foundations and corporations. The synergy created among the partners builds the expertise and capacity for Arkansas to become a true community of learners.

ARKANSAS WATER RESOURCES CENTER

http://www.uark.edu/depts/awrc/
Brian E. Haggard, director
OZAR 112
479-575-4403
awrc@uark.edu

The Arkansas Water Resources Center, a unit of the Division of Agriculture, was established by Public Law in 1964. The Center utilizes scientific personnel and
facilities of all campuses of the University of Arkansas system (and other Arkansas colleges and universities) in maintaining a water resources research program. The center supports specific research projects throughout Arkansas, which often provide research training opportunities for undergraduate and graduate students, and it disseminates information on water resources via publications and conferences. The center works closely with federal, state, municipal, educational, and other public groups concerned with water resources in development of its research, training, and dissemination programs.

---

**BESSIE BOEHM MOORE CENTER FOR ECONOMIC EDUCATION**

http://bmcee.uark.edu  
Rita Littrell, director  
RCE 217  
479-575-2855

The Bessie Boehm Moore Center for Economic Education, established in 1978 and located in the Walton College of Business, promotes an understanding of the American economy among the people of Arkansas. Its major efforts are directed to elementary and secondary school children. The center's faculty and staff hold workshops and seminars for public school teachers, conduct research in economic education, develop instructional materials, maintain a lending library, and sponsor adult economic educational programs for business, labor, industry, and the general community. In recent years, center personnel have been involved in educating teachers in transitional or developing economies about market economics. The center is officially certified by the Arkansas Council on Economic Education and the National Council on Economic Education.

For college-level students, the center sponsors the Walton College Students In Free Enterprise (SIFE) team. SIFE's mission provides college students the best opportunity to make a difference while developing leadership, teamwork, and communication skills through learning, practicing, and teaching the principles of free enterprise. The Walton College SIFE team welcomes members from other colleges who embrace their mission and want to grow through benefiting the local community. The University SIFE team is quickly becoming a nationally recognized organization.

---

**CENTER FOR ADVANCED COMPUTING AND COMMUNICATIONS RESEARCH**

The Center for Advanced Computing and Communications Research is housed in the College of Engineering. The Center was established to engage collaborative research in areas that benefit national and international computing and communications industries and Arkansas communities. These include, but are not limited to: algorithms development for information processing and testing, network processors, dependable, secure networks and computing resources, sensor and high performance networks, software and data engineering, cyber security, grid sand cluster computing, DNA computing, agent-based computing, and low-power systems.

---

**CENTER FOR ADVANCED SPATIAL TECHNOLOGIES**

http://cast.uark.edu/  
Jackson Cothren, director  
OZAR 12  
479-575-6159  
info@cast.uark.edu

The Center for Advanced Spatial Technologies (CAST) focuses on application of geospatial technologies in research, teaching, and service. These technologies include geomatics, GIS, GPS, remote sensing, photogrammetry, geospatial software and systems design, interoperability, and large (multi-terabyte) geospatial databases.

Established in 1991, CAST is a unit of the J. William Fulbright College of Arts and Sciences. CAST has a campus-wide focus, working with the departments of anthropology; architecture; crop, soil, and environmental science; biology; bioengineering; civil and industrial engineering; geosciences; entomology; and landscape architecture. Other related partners include the Environmental Dynamics Program, the Arkansas Water Resources Center, Mullins Library, and the Arkansas Archeological Survey.

CAST has been selected as a Center of Excellence by many corporations, including the Intergraph Corporation, Trimble Navigation Inc., the Oracle Corporation, Definiens Imaging, Sun Microsystems, Spatial Acquis, and PCI Geomatics. These and other corporate sponsors have provided more than $22 million of in-kind support of the research teaching facilities of the center. The center has extensive hardware and software capabilities, including more than 100 high-performance workstations, multiple Linux, Windows XP and Solaris servers (combined seven terabyte of online disk), large-format plotters, mapping and survey-grade GPS, MSS instruments, spectroradiometers, terrestrial laser scanners, and an extensive inventory of software.

University of Arkansas undergraduate and graduate students have a wide range of geomatics courses available to them that utilize CAST faculties and laboratories. These courses, taken along with related courses in cartography, remote sensing, image interpretation, photogrammetry; surveying, and spatial statistics, provide the student with a range of career options. CAST facilities are used by students in both undergraduate and graduate research projects. The internship program in Applied Spatial Information Technologies offers students an opportunity to gain hands-on experience in geospatial technologies.

CAST staff are engaged in research projects in a wide range of areas. A few recent research projects focused on areas such as the creation of a seamless, on-line spatial data warehouse; K-12 GIS education; soil survey by remote sensing; land-use/land-cover identification; remote sensing for historic resources; natural resources wetlands analyses; multi-sensor remote sensing for historic resources; and predicting red oak borer populations.

---

**CENTER FOR ARKANSAS AND REGIONAL STUDIES**

http://www.uark.edu/misc/arsinfo/  
Robert Cochran, director  
MAIN 506  
479-575-7708

A multidisciplinary agency within the J. William Fulbright College of Arts and Sciences, the Center for Arkansas and Regional Studies encourages research, publication, and dissemination of knowledge about life and culture in Arkansas and the surrounding region. The center administers the interdisciplinary major in American Studies and sponsors lectures, seminars, conferences, radio programs, and international student exchanges. The center also produces workshops and audio and video documentary recordings, and works with Mullins Library to locate and collect Arkansiana and other regional materials.

---

**CENTER FOR BUSINESS AND ECONOMIC RESEARCH**

http://cber.uark.edu/  
Kathy Deck, director  
WJWH 545  
479-575-4151  
cberinfo@cavern.uark.edu

The Center for Business and Economic Research (CBER) is a public service/outreach center and a student-faculty research center. An integral part of the Sam M. Walton College of Business, CBER conducts externally sponsored research for local and state government, as well as the state business community. The staff responds daily to requests for state and local economic and demographic data.

In addition to conducting externally funded research, CBER maintains several electronic database libraries of economic and financial information to serve the needs of students and faculty. Examples of organizations with which CBER has been involved include the Arkansas Department of Finance and Administration, Arkansas Department of Parks and Tourism, U.S. Army Corps of Engineers, Beverly Enterprises Inc.,
Mercury Energy, and the Arkansas Research and Technology Park planning group.

CBER publishes the Arkansas Business and Economic Review, a quarterly business and economics journal, which is dedicated to providing information about Arkansas’ business and economic environment. The review covers state, regional, and national business and economic issues. It includes state and regional economic indices relating to personal income, industrial output, employment, population, and other factors.

**CENTER FOR COMMUNICATION AND MEDIA RESEARCH**

http://www.uark.edu/depts/comm/Center_for_Communication_and_Media_Research.html
Robert H. Wicks, director
KIMP 417
479-575-3046
rwicks@uark.edu

The Center for Communication and Media Research (CCMR) advances knowledge and supports scholarly and applied inquiry into the study of interpersonal, group, organizational, and media communication. The center sponsors outreach programs designed to help under-served populations, educational institutions, media companies, businesses, and non-profit organizations.

Multidisciplinary in nature, the center facilitates scholarship among allied disciplines such as journalism, law, business, political science, psychology, sociology, and computer science. Research topics include communication and advertising, dispute resolution, education, environmental concerns, family, health, information technology, legal concerns, life stages, media audiences, organizational concerns, politics, and religion.

**CENTER FOR CHILDREN AND YOUTH**

http://coehp.uark.edu/9740.php/
Chris Goering, director
PEAH 305
479-575-4209
cgoering@uark.edu

The Center for Children and Youth is designed to address issues of intellectual growth, social development, literacy, the arts, and techniques for addressing generational or regional poverty issues. This will be accomplished through teacher professional development, pre-service education, research, as well as curriculum development and dissemination. The center was established by a generous gift of the Windgate Family Foundation in 2006 to the College of Education and Health Professions.

In 2010, the Center for Children and Youth hosted a national conference in Springdale, Ark., focused on the confluence of literacy and the arts. The conference featured speakers from the Kennedy Center for Performing Arts, Temple University, the National Council of Teachers of English, and local experts on arts integration approaches to teaching. Later in 2010, Dr. Chris Goering in the Curriculum and Instruction Department was appointed as the center’s first director. E-mail Dr. Goering or call him at 479-575-4209.

**CENTER FOR ENGINEERING LOGISTICS AND DISTRIBUTION**

http://celdi.ing.e.uark.edu/
Russell D. Meller, executive director
BELL 4207
479-575-2124

The Center for Engineering Logistics and Distribution (CELDi) is a multi-university, multi-disciplinary, National Science Foundation sponsored Industry/University Cooperative Research Center located in the Department of Industrial Engineering. CELDi emerged in 2001 from The Logistics Institute (1994) to provide integrated solutions to logistics problems, through research related to modeling, analysis, and intelligent-systems technologies. Research endeavors are driven and sponsored by representatives from a broad range of member organizations, including manufacturing, maintenance, distribution, transportation, information technology, and consulting. Partner universities include the University of Oklahoma, Oklahoma State University, and the University of Louisville. This partnership among academic institutions and industry represents the effective integration of private and public sectors to enhance a U.S. competitive edge in the global market place.

CELDi helps industry partners excel by leveraging their supply chain to achieve a distinguishable, sustainable difference. Member companies realize a measurable return on their investment by creating competitive value chains in terms of cost and service quality. Through basic research, collaborative applied research with industry, technology transfer, and education, CELDi is a catalyst for developing the engineering logistics methodology necessary for logistics value chain optimization.

**CENTER FOR EXECUTIVE EDUCATION**

http://cmed.uark.edu/
Therese Steifer, director
RCED 140
479-575-2856
cmed@walton.uark.edu

The Center for Executive Education in the Sam M. Walton College of Business provides executive and middle management training opportunities designed to enhance quality in leadership, management decision making, and human resource skills and abilities for corporate and public clients. Programs provide training for implementation of current acceptable practices and approaches to problem solving that support progressive management achievements. Programs are custom designed for individual clients, or they are designed in modular fashion from several pre-prepared programs to meet the general leadership needs of organizations and include such topics as customer service, leadership, team development, total quality and continuous improvement, and personal skills development. The center serves local, national, and multinational businesses. The center operates on a fee-for-service basis, and its activities are supported from fee based revenues. It also provides directive support for Arkansas manufacturers who seek to produce and market products for the mass market and for its retailers through the Support Arkansas Made program. Support Arkansas Made assists manufacturers in the evaluation of new products and product ideas based upon marketable criteria.

**CENTER FOR INFORMATION SECURITY AND RELIABILITY**

http://cmed.uark.edu/
Brajendra Panda, director
JBHT 504
479-575-2067
bpanda@uark.edu

The center was established to promote education and research in the field of computer security and information assurance at University of Arkansas. The activities of this center includes, but not limited to the following; fostering interdisciplinary research, securing large-scale funding from federal, state, and other funding agencies, providing education and training to future work-force, increasing awareness in the field of information security and reliability by offering appropriate seminars and workshops.
**CENTER FOR INNOVATION IN HEALTHCARE LOGISTICS**

http://cihil.uark.edu/
Ron Rardin, director
479-575-6033

Founded in March 2007, the Center for Innovation in Healthcare Logistics in the College of Engineering seeks ways to adapt logistics and supply chain solutions from other industries to improve the delivery of health care. The goal is to recover significant costs and achieve new efficiencies, while enhancing safety, quality and equity of patient care.

**CENTER FOR MATHEMATICS AND SCIENCE EDUCATION**

http://cmase.uark.edu
Lynne Hehr, director
346 N. West Avenue, No. 102
479-575-3875

The Center for Mathematics and Science Education (CMASE) – a University of Arkansas K-16 education outreach facility within the College of Education and Health Professions – works in conjunction with the Arkansas Department of Higher Education as part of a network of twelve mathematics and science centers on university and college campuses around Arkansas. The main objectives of the center are to 1) provide science, mathematics and technology professional development for K-16 pre-service and in-service teachers; 2) assist in statewide K-16 education initiatives; 3) coordinate regionally beneficial grant-funded programs among universities and colleges for K-16 education; 4) provide science, mathematics and technology educational materials, resources, and information to the K-16 community; and 5) link common K-16 education allies throughout the state.

University Day, Science/Engineering Fairs, Springfest, and various K-16 teacher and student programs are conducted through CMASE. Day-to-day educational outreach information is sent to local, regional, and statewide constituencies through the Center’s Web site and various e-mail listservs. CMASE is a host site for the federally sponsored Eisenhower National Clearinghouse and the Southwest Educational Development Laboratory Consortium. CMASE also serves as the Arkansas National Aeronautics and Space Administration (NASA) Educator Resource Center, responsible for warehousing and disseminating NASA materials and providing regular updates on NASA programs and materials to the state.

Web pages specifically designed to provide a wealth of material resources and information available for public, private and home-school educators across the state can be accessed at the Web site.

**CENTER FOR PROTEIN STRUCTURE AND FUNCTION**

http://protein.uark.edu/
Frank Millett and Roger Koepppe, co-directors
CHEM 119
479-575-4601

The Center for Protein Structure and Function is an interdisciplinary unit for research and teaching within the departments of chemistry/biochemistry and biological sciences in the J. William Fulbright College of Arts and Sciences. The center raises funds from federal, state, and private sources and sponsors faculty- and student-initiated basic research on the folded structures of protein molecules, their dynamic properties, and their diverse functions in biological systems. The center has been awarded funding from the National Science Foundation, the Arkansas Science and Technology Authority, and the National Institutes of Health.

**CENTER FOR RETAILING EXCELLENCE**

http://cre.uark.edu/
Claudia B. Mobley, director
WJWH 538
479-575-2643

The Center for Retailing Excellence in the Sam M. Walton College of Business promotes superior performance in retail practice through both research and education programs. Through its efforts, the center promotes student interest in and preparation for careers in retailing and closely related businesses. The center works to develop strategic alliances between business academics and industry by focusing on interdisciplinary issues and concerns of retailers and vendors in both its activities and research programs. By means of its initiatives and support, the center stimulates research that advances knowledge of retailing and addresses problems faced by retailing organizations and vendor firms. The Center for Retailing Excellence provides a range of benefits for constituent groups comprised of students, retail organizations and their suppliers, and faculty researchers.

**CENTER FOR SEMICONDUCTOR PHYSICS IN NANOSTRUCTURES**

http://www.nhn.ou.edu/cspin
Greg Salamo, co-director
PHYS 226
479-575-5931

The University of Arkansas and University of Oklahoma are equal partners in the Center for Semiconductor Physics in Nanostructures (C-SPIN). C-SPIN is funded by the National Science Foundation under the Materials Research Science and Engineering Center program, with $4.5 million in NSF funding committed to C-SPIN over five years.

C-SPIN personnel include faculty from the physics and chemistry departments. C-SPIN students are enrolled in physics, chemistry, and microelectronic-photonics graduate programs and pursue research ranging from the study of quantum dots grown one atom at a time to colloidal nanocrystals destined to become future detectors of biological processes. In addition to the nanoscience emphasis of C-SPIN, the center also strongly supports K-12 outreach efforts to move the excitement of advanced research into school systems. The efforts of C-SPIN personnel in this area are designed to increase the level of science and technology competency in both Oklahoma and Arkansas. For more information, visit the C-SPIN website.

**CENTER FOR SOCIAL RESEARCH**

William Schwab, director
Main 211
479-575-3206
bschwab@uark.edu

Since 1982 the Center for Social Research has provided research services to government agencies, communities and businesses. Located in the Department of Sociology, the center can conduct survey and public opinion research, impact assessment, evaluation and policy assessment. The center’s staff can provide assistance with research methodology and design, sampling, data collection and analysis.

The center’s professional staff has vast experience in virtually every aspect of social research. In addition, the center’s resources include computer-assisted telephone interviewing facilities; extensive archival data holdings, including online access to the archival holdings of the Inter-University Consortium for Political and Social Research at the University of Michigan; and, in-house statistical analysis.

For more information, contact Director William Schwab at 479-575-3206.
The Center for Statistical Research and Consulting will be a service and research unit of UA, administratively housed in Department of Mathematical Sciences, providing faculty and graduate students in the university with an environment for collaboration in research and instruction emphasizing statistical / quantitative approaches. It offers statistical consulting and statistical software support to faculty, staff, graduate and undergraduate students conducting research at UA. The center will extend this statistical support to the State of Arkansas, directly providing some consulting services but primarily acting as a conduit for industry, government, and non-profit organizations to engage campus faculty and graduate students in consulting opportunities. The community support activities from the center will stimulate and enhance campus research and instructional efforts as well as provide important services to organizations throughout the region.

The mission of the Center for Statistical Research and Consulting is to participate in research to provide high quality statistical input to high quality research projects, train statisticians to interact effectively with investigators from other disciplines, and encourage collaborative research between statisticians and investigators from other disciplines.

The center is a fee-for-service unit. The initial consulting meeting with a client is provided at no cost. All subsequent and follow-up visits will require financial support.

---

### CENTER FOR THE UTILIZATION OF REHABILITATION RESOURCES FOR EDUCATION, NETWORKING, TRAINING AND SERVICES

**http://www.rcp6.org/**

Jeanne Miller, director
105 Reserve St., Building 35
Hot Springs, AR 71902
501-623-7700

Established in 1974, this center provides human resource and organization development services for a broad audience in the rehabilitation and disability communities. Projects managed by CURRENTS vary in scope from state and local to regional and national levels. The center is housed at the Hot Springs Rehabilitation Center, Hot Springs, Arkansas.

**REHABILITATION RESEARCH AND TRAINING CENTER FOR PEOPLE WHO ARE DEAF OR HARD OF HEARING**

**http://www.uark.edu/depts/rehabres/**

Douglas Watson, project director
26 Corporate Hill Drive
Little Rock, AR 72205
501-686-9691 (v/tty)

Established in 1981, this national center conducts research and training programs to enhance rehabilitation efforts on behalf of the 31 million U.S. citizens who are deaf or hard of hearing. These programmatic efforts are directed toward enhancing the career preparation, job entry and placement, career advancement, and workplace communication accommodations consistent with the Americans with Disabilities Act. The center is located in Little Rock and is currently conducting research focused on improving the nation’s services for those individuals with functional limitations that necessitate intensive and longer-term education, rehabilitation and related services to enhance employment, independent living and community participation.

---

### CENTER OF EXCELLENCE FOR POULTRY SCIENCE

**http://www.poultryscience.uark.edu/**
Michael Kidd, director
POSC 114
479-575-3699

With designation by the University of Arkansas Board of Trustees to make poultry science a center of excellence in the state’s university system, the department of poultry science became a reality in 1992.

The Center of Excellence for Poultry Science (CEPS) is comprised of full-time poultry science faculty members, full-time USDA/ARS Poultry Research Group faculty members, graduate assistants, adjunct faculty, and poultry science departmental staff. CEPS receives multidisciplinary contributions from several University departments including animal science; biological and agricultural engineering; biological sciences; crop, soil, and environmental sciences; entomology; food science; industrial engineering; the School of Human and Environmental Sciences; and the UALR College of Pharmacy.

The Department of Poultry Science and the research group are housed in the John W. Tyson Building, which is a 112,000-square-foot, state-of-the-art laboratory and office complex that was completed the fall of 1995 on the UA campus. In addition to the John W. Tyson Building on the main campus, CEPS comprises the following facilities:

- FDA-licensed feed mill;
- 10,000-square-foot processing plant used for teaching processing techniques and for ongoing food safety research projects;
- 12,000-square-foot John Kirkpatrick Skeels Poultry Health Laboratory, which holds the highest bio-safety rating (P3) available in the country;
- A poultry research farm facility including hatchery, genetics unit, pullet-rearing facility, battery brooder, caged layer house, broiler breeder houses and turkey houses;
- Four full-sized broiler houses equipped with computerized environmental control and data collection systems capable of commercial-type production research; and
- A broiler breeder research facility that includes two full-size broiler breeder houses, a pullet-rearing facility, and quality assurance building with offices, classroom, and egg holding capacity.

---

### CHEMICAL HAZARDS RESEARCH CENTER

**http://www.chem.uark.edu/4444.php/**

Jerry Havens, director
BELL 3157
479-575-3857
jhavens@uark.edu

The Chemical Hazards Research Center determines the consequences of atmospheric releases of potentially hazardous materials with a present emphasis on liquefied natural gas in transportation and storage operations. Computational models are used in conjunction with the wind tunnel at the center, which is presently the largest low-speed wind tunnel suited for such studies.

---

### THE COMMUNITY AND FAMILY INSTITUTE

**http://sociology.uark.edu/3550.php**

Kevin Fitzpatrick, director
MAIN 211
479-575-3777
kfitzpa@uark.edu

The Community and Family Institute is a joint effort of the University of Arkansas and the Harvey and Bernice Jones Center for Families in Springdale, Arkansas. The institute is a multidisciplinary research center in the J. William Fulbright College
of Arts and Sciences that conducts basic and applied research, as well as policy-related studies on the critical issues facing families and communities in the region and the nation. The institute raises funds from federal, state, and private sources and sponsors applied research by faculty and students on the family and the community.

DAVID AND BARBARA PRYOR CENTER FOR ARKANSAS ORAL AND VISUAL HISTORY
http://libinfo.uark.edu/specialcollections/pryorcenter/
Kris Katrosh, director
MULN 403
479-575-6829

The mission of the Pryor Center for Arkansas Oral and Visual History is to document Arkansas’ rich history by collecting the “living memories” of those who have been witness to various aspects of the state’s past. Using traditional oral history methodology, the center interviews individuals, transcribes those interviews, and deposits them with the Special Collection’s Division of the University of Arkansas Mullins Library. The center is responsible for preserving these memories and making them available to scholars and researchers interested in the culture and heritage of Arkansas. The center is located in Mullins Library, Room 403, 365 N. McIlroy Ave., University of Arkansas, Fayetteville, AR 72701; to contact the center, call 479-575-6829, or visit the website.

DIANE D. BLAIR CENTER OF SOUTHERN POLITICS AND SOCIETY
http://www.uark.edu/ua/tshield
Todd Shields, director
MAIN 428
479-575-3356

The Blair Center, located in the Department of Political Science, is dedicated to fostering political scholarship, public service, civic consciousness, and the study of Southern politics, history and culture. The center supports graduate students studying topics relevant to the South and hosts conferences and periodic speakers discussing issues relevant to Southern politics and society.

ENGINEERING EXPERIMENT STATION

Research is a major function of each of the faculties within the seven departments in the College of Engineering. Research coordination is achieved through the Engineering Experiment Station, which was established for that purpose by an act of the Arkansas Legislature in 1920.

The overall goal of research in the College of Engineering is to provide engineering solutions to important problems that face our society. We utilize our faculty, staff, students, and facilities to enhance the well-being of both public and private sectors. Student involvement in research is especially important in that it helps link them to the needs of their future employers. All departments – biological and agricultural, chemical, civil, computer engineering, electrical, industrial, and mechanical engineering – conduct research over a broad spectrum of subjects that includes areas such as biological and chemical processes; electronics manufacturing; environmental and ecosystems analysis; material and manufacturing; software and telecommunications; and transportation, logistics, and infrastructure. Funding for research within the college comes primarily through grants received from government and industry sources.

ENGINEERING RESEARCH CENTER
http://www.uark.edu/ua/artp/facilities/enrc.html
Mike Brosius, facility manager
700 Research Center Blvd.
479-575-7318
brosius@uark.edu

The Engineering Research Center provides the facilities and support services for a wide variety of research activities of the College of Engineering. The center houses the Engineering Experiment Station through which the research of individual departments of the college is handled, the Genesis Technology Incubator program, the Southwestern Regional Calibration Center, the High Density Electronics Center, the Arkansas Center for Technology Transfer, the Industrial Training Laboratory, the Center for Interactive Technology, the Systems Technology Laboratory, the Highway Construction Materials Laboratory, the Hydrology Laboratory, the Low-Speed Wind Tunnel Laboratory, and the engineering extension office.

The center is located in a modern 186,000-square-foot facility on 32 acres approximately two miles south of the main campus in Fayetteville.

FULBRIGHT INSTITUTE OF INTERNATIONAL RELATIONS
http://www.uark.edu/~fiir/
Donald R. Kelley, director
MAIN 428
479-575-2006

An interdisciplinary unit within the J. William Fulbright College of Arts and Sciences, the Fulbright Institute of International Relations encourages student and faculty research and scholarly analysis of foreign policy and international affairs. The institute sponsors instructional activities, conferences, seminars, public events, and publications, including a major spring symposium on a significant topic in international affairs. The institute’s office of Study Abroad and International Exchange coordinates a number of overseas programs and provides support services for students interested in study abroad.

GARRISON FINANCIAL INSTITUTE
http://gfi.uark.edu
Wayne Lee, executive director
RCED 205
479-575-4399

The Garrison Financial Institute is an institute organized within the Sam M. Walton College of Business to advance financial education and knowledge through practice. Its mission is to enhance student learning through experience, foster research that extends and perfects best practices, and contribute to the economic development of the State of Arkansas and the welfare of its citizens. The center was founded in 2005.

GARVAN WOODLAND GARDENS
http://www.garvangardens.org/
Bob Byers, Garden Director
550 Arkridge Road, PO Box 22240
Hot Springs National Park, AR 71913
1-800-366-4664
gardensinfo@garvangardens.org

Garvan Woodland Gardens is the botanical garden of the University of Arkansas, established in 1993 by an endowment from Mrs. Verna C. Garvan. Her vision is the foundation of the Garden’s mission to serve the public and provide teaching and
research opportunities for the Department of Landscape Architecture and the Fay Jones School of Architecture.

As early as 1985, the Department of Landscape Architecture was utilizing portions of the 210 acres on Lake Hamilton, in Hot Springs, AR, as a resource to teach local ecology and design principles. Teaching opportunities continue in these areas and currently feature urban forestry, wetland ecology, construction methods and materials, design implementation, and horticulture. Numerous designed features offer case studies for landscape architecture and architecture students as well as professionals, including the Asiatic Garden by David Slawson, a nationally recognized Japanese garden designer, and the Verna C. Garvan Pavilion, by internationally recognized architects Fay Jones and Maurice Jennings.

Research opportunities lie in wetland ecology and constructed wetland design, sustainable design, and therapeutic gardens. Ongoing public programs feature workshops on gardening techniques, bonsai collections, and perennials.

An annual symposium focuses on timely issues affecting the quality of life of people in Arkansas and the nation. Past topics include historic landscape preservation practice in Arkansas and sustainable golf course design.

Garvan Woodland Gardens is a member of the American Association of Botanical Gardens and Arboreta.

GENESIS TECHNOLOGY INCUBATOR

http://www.uark.edu/ua/artp/
David Whitmire, director of finance
700 Research Center Blvd.
479-575-7446

Located at the Arkansas Research and Technology Park and acting as a resource for the University, GENESIS provides technology-based companies with research and development support by allowing these firms access to University labs and facilities as well as technical support from University researchers. Firms accepted into GENESIS are provided physical space in University research centers as well as office space, shared support services, and both business and technical guidance. GENESIS’ goal is that of creating jobs for Arkansans skilled in the science and engineering professions as well as helping to diversify both Arkansas’ technology and economic base. Applicants must meet strict technical guidelines as determined by a committee of University researchers, administrators, and a 15-member advisory board comprised of community business leaders. GENESIS was conceived to span all University colleges and departments by providing entrepreneurs needing research and development support a method for obtaining and coordinating the same through a program which focuses the resources of the entire campus for this common objective.

HIGH DENSITY ELECTRONICS CENTER

http://www.hidec.uark.edu/
Simon Ang, director
HiDEC/ENRC 700
479-575-4627

The High Density Electronics Center (HiDEC) was established in 1991 as an interdisciplinary research program in advanced electronic packaging technologies, particularly the rapidly developing technology of multichip modules (MCMs), which allow electronic systems to be small, fast, and cheap. With generous support from the Defense Advanced Research Projects Agency (DARPA), a large clean room was constructed, and an MCM fabrication facility, unique among universities, was installed. Current research programs focus on 3-D electronic packaging, high density laminate substrates, co-fired ceramic substrates for wireless applications, high temperature superconducting (HTSC) tunable filters, micro electromechanical systems (MEMS), and integrated passives development. The program is located in the Department of Electrical Engineering but involves faculty from six departments and more than 25 graduate students. Continuing funding comes from DARPA and several industrial sponsors. Significant national recognition has resulted from work performed at HiDEC.

HiDEC also houses the Center of Excellence for Nano-, micro-, and Neuro-Electronics, Sensors and Systems (CENNESS).

HUMAN PERFORMANCE LABORATORY

http://hpl.uark.edu
Ro DiBrezzo, director
HPER 321
479-575-6762

The Human Performance Laboratory in the College of Education and Health Professions in the Department of Health Science, Kinesiology, Recreation and Dance has a dual-purpose mission: educational outreach and research programs for targeted populations. The program is committed to the pursuit of knowledge about the health and well-being of people through research, research dissemination, outreach, and service. Known for an emphasis on fitness, the program provides an opportunity for faculty and students to conduct ongoing research and service programs.

INFORMATION TECHNOLOGY RESEARCH INSTITUTE

http://itrc.uark.edu/
Eric Bradford, managing director
JPHT 409
479-575-4261

The Information Technology Research Institute (ITRI) is an interdisciplinary unit for research within the Sam M. Walton College of Business. The mission of the ITRI is to advance the state of research and practice in the development and use of information technology for enhancing the performance of individuals and organizations; provide a forum for multi-disciplinary work on issues related to information technology; promote student interest in the study of information technology; and facilitate the exchange of information between the academic and business communities. The ITRI was established by a grant from the Walton Family Charitable Support Foundation.

INSTITUTE FOR NANOSCIENCE AND ENGINEERING

http://nano.uark.edu/
Gregory Salamo, director
NANO 104
479-575-4187

The Institute for Nanoscience and Engineering is based in the Nanoscale Material Science and Engineering Building, opened in 2011 with the state-of-the-art equipment and clean rooms necessary for building materials one atom at a time. The institute provides an interdisciplinary team of researchers in the fields of physics, engineering, chemistry and biology whose mission, in part, is to develop businesses in Arkansas based on nanoscience and engineering.

INSTITUTE OF FOOD SCIENCE AND ENGINEERING

http://www.uark.edu/depts/ifse/
Jean-Francois Meullenet, director
Food Science Building
2650 N. Young Ave.
Fayetteville, AR 72704
479-575-4040

The Institute of Food Science and Engineering and its three technology centers grew from the commitment of the University of Arkansas Division of Agriculture to finding creative ways to bring its expertise and resources to bear on specific problems and issues that affect productivity and growth in the food processing industry, with the mission of strengthening that critical component of the agricultural sector and the entire economy.
The institute assists industry by fostering cooperative, multidisciplinary efforts that provide research to solve problems, technology transfer to put new information to work, and education in skills needed by specific industries. Alliances between the institute and private industry devise solutions to identified problems. This demand-driven approach assures a direct, positive impact on the value-added processing of food products.

The Center for Food Processing and Engineering's primary objective is to facilitate research leading to value-added products and improving the efficiency and effectiveness of the processing of agricultural products. Activities of the Center for Food Safety and Quality seek to maintain or improve the safety of foods through production, harvest, processing, distribution, and storage. The main thrust of the Center for Human Nutrition is to develop new value-added functional foods with elevated levels of health-promoting compounds and ways to motivate people to include generous amounts of these foods in their daily diets. These efforts will assure food safety and improve the sensory and nutritional quality of food to meet the nutritional requirements and food preferences of a changing society.

The offices of the Institute of Food Science and Engineering are located in the Food Science Building at the Arkansas Agricultural Research and Extension Center.

INTERNATIONAL CENTER FOR THE STUDY OF EARLY ASIAN AND MIDDLE EASTERN MUSICS

http://www.uark.edu/ua/eam
Rembrandt Wolpert, director
MUSC 201
479-575-4701
ceam@cavern.uark.edu

The International Center for the Study of Early Asian and Middle Eastern Musics, established in 2000, is a research center located in the Department of Music in the J. William Fulbright College of Arts and Sciences.

The center coordinates the international Tang Music Project and is linked with the Ancient Asian Music Preservation Project of the Library of Congress, a partnership that includes internships at the Library as well as an acquisitions program. The center also functions as the base for graduate training in historical ethnomusicology and related fields, specifically tailored toward early documented repertoires of ritual- and art-music and present day performance practices in historically significant musical traditions of Asia and the Middle East. The recovery of early Asian musics and the design of music-centered algorithms and their implementation in computer programs are central aspects of the center’s research and teaching activities. The center works closely with both the Department of Music and the King Fahd Center for Middle East and Islamic Studies in sponsoring lectures, seminars, concerts, and workshops, and it collaborates in developing international ties to other institutions and in promoting student and performing-artist exchanges. For more information, contact Elizabeth Markham or Rembrandt Wolpert at 479-575-4702.

MACK-BLACKWELL NATIONAL RURAL TRANSPORTATION STUDY CENTER

http://www.mackblackwell.org/
Heather Nachtmann, director
BELL 4190
479-575-5857

The Mack-Blackwell National Rural Transportation Study Center (MBTC) was established by a grant from the U.S. Department of Transportation to provide educational opportunities and conduct research in the area of rural transportation. Additional support is received from the Arkansas Highway and Transportation Department.

The broad objective of the center is to improve the quality of life in rural areas through transportation. The educational objective is to provide graduates qualified to enter the transportation-related professions with the diversity of backgrounds needed to lead transportation development in the 21st century. Although housed within the Department of Civil Engineering, MBTC’s activities are not limited to engineering. All disciplines related to or impacted by transportation participate in MBTC research and educational activities.

KING FAHD CENTER FOR MIDDLE EAST STUDIES

http://mest.uark.edu/
Joel Gordon, director
MAIN 202
479-575-4755

The King Fahd Center for Middle East Studies is an academic and research unit in the J. William Fulbright College of Arts and Sciences. It is an interdisciplinary and interdepartmental area studies center that offers diverse cultural, intellectual, and educational opportunities for the University of Arkansas community. Its functions include the promotion of research and teaching in interdisciplinary Middle East studies and global Islamic studies.

Through the King Fahd Middle East Studies Program (MEST), the center offers an undergraduate major in Middle East Studies and supports graduate studies in Middle East-related departments and programs. Middle East studies majors of superior ability may apply for MEST scholarships to help fund their studies. The center also supports summer language study and research assistantships for graduate students and teaching and research by visiting scholars from affiliated universities and programs.

Through its core faculty, the center coordinates with University departments to offer a full range of Middle East courses, supports faculty research in Middle East and Islamic studies, engages in outreach activities, and supports an ambitious program of visiting speakers and workshops. The King Fahd Center currently maintains relationships with universities in Saudi Arabia, Jordan, Morocco, Tunisia, and Russia. The center also cooperates with the Aga Khan Humanities Program in Central Asia, the Middle East Institute in Washington, D.C., and the Elijah Center for the Study of Wisdom in World Religions in Jerusalem.

NATIONAL AGRICULTURAL LAW CENTER

http://www.NationalAgLawCenter.org/
Harrison Pittman, director
WATR 107
479-575-7646
nataglaw@uark.edu

The National Agricultural Law Center is a federally funded agricultural law research and information center located at the University of Arkansas School of Law. Created in 1987, the center fulfills its mission by conducting and sponsoring objective and authoritative agricultural and food law research and by providing bibliographic and other resources on agricultural and food law.

The center works closely with the UA School of Law Graduate Program in Agricultural Law, an academic program that awards the Master of Laws degree in Agricultural Law. Selected students in the graduate program serve as research fellows at the center during their residency in the graduate program.

The center is the only one of its kind in the United States and has received national recognition. It recently enhanced its national reach by establishing a collaborative relationship with the Agricultural Law Center at Drake University School of Law in Des Moines, Iowa.

Publications and research assistance are available in print and through the website.
The National Center for Reliable Electric Power Transmission (NCREPT) in the College of Engineering is located in a new building at the Arkansas Research and Technology Park. The Center seeks to research and develop prototypes of advanced power electronics systems for applications in the power grid, including both protection and storage devices.

The Center also serves as a test facility for advanced power electronic circuit and package designs for distribution-level voltages and high currents. The Center is a unique educational resource for students interested in working in the power utility and power electronics sectors.

The Office of Research, Measurement, and Evaluation, organized in 1998, is a research and service unit in the College of Education and Health Professions in the Department of Curriculum and Instruction. Its mission includes the analysis and dissemination of data to facilitate school improvement and reform in Arkansas. The faculty and staff of the office offer expertise in the areas of educational statistics, test and measurement theory, research design, standardized assessment, program evaluation, and policy analysis. The mission of the office is to conduct targeted educational research, drawing on the talents of several disciplines. The research conducted through the office addresses significant issues affecting the educators and students of the public schools of the state.

Established in 1997, the Northwest Arkansas Writing Project is affiliated with the National Writing Project at the University of California, Berkeley. Based in the College of Education and Health Professions in the Department of Curriculum and Instruction, the project involves teachers in workshops and institutes to prepare them to be creative and effective in their classroom writing programs. The project supports collaborative efforts with the public schools to enhance the teaching of writing, extend the uses of writing in the curriculum, and foster the professional development of teachers. Project institutes enable teachers to develop relationships with fellow teachers to create communities of professionals focused on the improvement of writing by students in K-12 schools and at the college level. During the school year, institute graduates attend follow-up sessions, provide workshops in local schools, and serve as resources in their communities. KidWrite, a companion program for children, provides a summer experience for the exploration of writing and guided practice through the writing of poems, plays, short stories, songs, and newsletters.

The Office for Education Policy was established in the College of Education and Health Professions in 2003 and is currently housed in the Department of Education Reform. The office serves as an objective, third-party source of data, gathering and disseminating evidence that would aid lawmakers and policymakers in making thoughtful decisions regarding education in the state of Arkansas. The primary objective of the Office for Education Policy is to collect and analyze data relevant to educational policy issues and disseminate the findings to policymakers in a timely and accessible manner. The office addresses questions of specific interest to Arkansas education policymakers in regularly published policy briefs, fact sheets and its newsletter, Education Policy News.

The Office for Education Policy also responds to specific requests of lawmakers and anticipates and addresses potential areas of interest to lawmakers. Finally, the office examines and follows national trends in education and shares the information with Arkansas policymakers.

The Office for Education Policy also responds to specific requests of lawmakers and anticipates and addresses potential areas of interest to lawmakers. Finally, the office examines and follows national trends in education and shares the information with Arkansas policymakers.

The Office for Education Policy also responds to specific requests of lawmakers and anticipates and addresses potential areas of interest to lawmakers. Finally, the office examines and follows national trends in education and shares the information with Arkansas policymakers.

The Office for Education Policy also responds to specific requests of lawmakers and anticipates and addresses potential areas of interest to lawmakers. Finally, the office examines and follows national trends in education and shares the information with Arkansas policymakers.

The Office for Education Policy also responds to specific requests of lawmakers and anticipates and addresses potential areas of interest to lawmakers. Finally, the office examines and follows national trends in education and shares the information with Arkansas policymakers.

The Office for Education Policy also responds to specific requests of lawmakers and anticipates and addresses potential areas of interest to lawmakers. Finally, the office examines and follows national trends in education and shares the information with Arkansas policymakers.
The Office for Studies on Aging in the College of Education and Health Professions was established in August 1999 to coordinate the resources of the University in addressing the needs of the aging population in Arkansas and beyond. The office was developed to be the center for research and study of the physical, social, and psychological aspects of the aging process drawing on a host of disciplines across campus. The office conducts research, provides services, and acts as an interface between the University and the variety of service modalities for the aging population. Initial efforts of the office are directed toward a variety of issues facing older Americans to provide meaningful solutions so that the process of aging is a positive experience, both emotionally and physically.

The Small Business and Technology Development Center (SBTDC), located in the Walton College of Business, provides small business consulting and technical assistance to the business community of Northwest Arkansas. The SBTDC serves as the focal point for linking together resources of the federal, state, and local governments with resources of the University, the Sam M. Walton College of Business, and the private sector. These resources are utilized to counsel and train small businesses in resolving organizational, financial, marketing, technical, and other problems they might encounter. The SBTDC offers free consulting services to small business clients. Seminars for small businesses are offered on a wide range of topics. Small Business Administration publications, other relevant small business publications, and Internet access are available for small business owners in the SBTDC resource center.

The Supply Chain Management Research Center (SCMRC) at the Sam M. Walton College of Business sponsors and promotes supply chain, logistics, and transportation research and education. Center faculty view the supply chain as the channel that integrates business processes from suppliers through end users, providing value-added products, services, and information. Supply chain management incorporates both inter- and intra-company logistics, transportation, and management systems.

The center undertakes research and training in all aspects of the supply chain. It has sponsored research on VMI, trained salespersons and developed MRP systems, and simulated supply chains for logistics executives. The SCMRC has a broad range of interests and capabilities and has close ties to and cooperative programs within the Walton College (e.g., Center for Retail Excellence, Information Technology Research Center) and with other centers at the University (e.g., The Logistics Institute in the College of Engineering). The SCMRC is unique in that its capabilities span the technical and managerial arenas of supply chain management.

The SCMRC’s Board of Directors includes representatives of firms such as ABF Freight Systems, American Freightways, Colgate-Palmolive, Federal Express, J.B.
University Centers and Research Units

Hunt Transport, Pillsbury, Sunbeam, Tyson Foods, Unilever HPC, and Wal-Mart. The Board of Directors, along with notable supply chain professionals from business and academia, meet annually to discuss the state of the art in supply chain management and to provide advice and direction for the center.

For additional information about the Supply Chain Management Research Center at the Sam M. Walton College of Business contact the center at 479-575-7334 or fax 479-575-4173.

TERRORISM RESEARCH CENTER

http://trc.uark.edu/
Brent L. Smith, director
MAIN 228
479-575-3401
bls@uark.edu

The Terrorism Research Center in the J. William Fulbright College of Arts and Sciences houses the American Terrorism Study, the nation’s only comprehensive longitudinal database on American terrorism. Conducted in cooperation with the Federal Bureau of Investigation and sponsored by the U.S. Senate Judiciary Committee, the American Terrorism Study provides a record of federal terrorism cases resulting from indictment under an FBI "terrorism enterprise" investigation from 1980 to the present. The center is also engaged in several projects examining the spatial and temporal dimensions of terrorism, precursor and preparatory terrorist crimes, and prosecutorial and defense strategies in terrorism trials. The center’s research is funded by the Department of Homeland Security through the Memorial Institute for the Prevention of Terrorism and the Department of Justice through the National Institute of Justice.

TYSON CENTER FOR FAITH AND SPIRITUALITY IN THE WORKPLACE

http://trc.uark.edu/
Judith Neal, director
WJWH 518
479-575-3721
jan002@uark.edu

The center’s vision is to be recognized as an international center networked with other international centers, where students, academics, practitioners, business leaders and faith leaders come together to understand the effects of faith and spirituality in the workplace and develop methodologies to help transform organizations in a way that has a positive impact on the world. The center teaches courses on faith and spirituality in the workplace, provides resources to businesses and community, and maintains a database of relevant research, including conducting its own case studies.

The Tyson Center for Faith and Spirituality in the Workplace was established by a grant from Tyson Foods Inc. and the Tyson Family Foundation in 2009.

UNIVERSITY OF ARKANSAS COMMUNITY DESIGN CENTER

http://uacdc.uark.edu/
Stephen Luoni, director
104 N. East Ave.
Fayetteville, AR 72701
uacdc@uark.edu

The mission of the University of Arkansas Community Design Center is to advance creative development in Arkansas through education, research, and design solutions that enhance the physical environment. As an outreach center of the Fay Jones School of Architecture, UACDC is developing a repertoire of new design methodologies applicable to community development issues in Arkansas, with currency at the national level. UACDC design solutions introduce a multiple bottom line, integrating social and environmental measures into economic development. Integrative design solutions add long-term value and offer collateral benefits related to sustained economic capacity, enhanced ecologies, and improved public health. The design center also offers hands-on civic design experience to students who work under the direction of design professionals. UACDC was founded in 1995 and has provided design and planning services to more than 30 communities across Arkansas. UACDC planning has helped Arkansas communities and organizations to secure nearly $62 million in grant funding to enact suggested improvements.
Student Affairs

VISION STATEMENT

The University of Arkansas Division of Student Affairs engages students to develop their strengths, inspiring leadership for a global society.

Mission Statement

The University of Arkansas Division of Student Affairs strengthens students for success.

Values

The University of Arkansas Division of Student Affairs values inclusion, service, inquiry, partnership, and excellence:

Inclusion: We embrace the uniqueness of individuals and engage every member of our diverse community.

Service: We connect students to resources, opportunities, and experiences transforming them into active, engaged citizens of a global society.

Inquiry: We engage ourselves and our students in the acquisition, application, and creation of knowledge for lifelong learning.

Partnership: We explore and welcome opportunities to collaborate with our students, colleagues, and members of our global community.

Excellence: We apply our varied talents and strengths with integrity to providing exceptional service to our students.

Strategic Goals

To achieve this Mission the University of Arkansas Division of Student Affairs will:

• Foster the ongoing development of an inclusive community.
• Enhance students learning through effective programs and services.
• Advocate rights and responsibilities through service to students and collaboration with partners.
• Steward all of the Division’s resources responsibly.
• Communicate and collaborate effectively.

The Vice Provost for Student Affairs/Dean of Students administers the departments of the Division of Student Affairs and provides leadership in the development of programs and services that supplement the classroom experience of students and enrich the quality of campus life. The Vice Provost/Dean of Students serves as a liaison to other administrative offices, faculty, and student governing groups. The office is a central source of information concerning University policies and procedures affecting student life and co-curricular programs and services.

The Division of Student Affairs and the office of the Vice Provost/Dean of Students emphasizes student advocacy while broadening the development of services and programs that address a range of student and campus needs. Departments in the Division are dedicated to developing exceptional programs and services that enhance the University of Arkansas Experience and enrich the quality of student and campus life. Staff members are available and willing to assist with any problem or question a student, staff, or faculty member may have regarding student and campus life at the University of Arkansas. The office is available for the clarification of University policies and procedures, confidential consultation, formal academic grievances, personal and family crisis assistance for students, and referral to all campus and community services. The office also seeks to assist students and faculty members in cases of emergency or extenuating circumstances. Staff members are firmly committed to addressing the challenges and individual needs of the University of Arkansas family.

The Division of Student Affairs is committed to strengthening students for success. In this effort, the Division is developing a two-tier model of student development and staff development. StrengthsQuest is a trademarked online assessment tool that helps individuals discover, define, and develop their talents into strengths to achieve success. The Division of Student Affairs at the University of Arkansas is committed to providing opportunities for university members to discover, develop and apply their talents and strengths for personal and professional success. Ultimately, success is defined by each student and staff member and comes as a result of understanding their unique talents, developing knowledge related to those talents, engaging in experiences to expand on those talents, and ultimately leveraging those talents to become strengths which lead to success.

STUDENT LIFE

Off Campus Connections

Off Campus Connections provides freindly and helpful resources and referrals for off-campus undergraduates, which includes:

• First-year students living at home
• Upperclassmen living off campus
• Adult, returning, and transfer students

Off-campus students are defined as undergraduates not living in a residence hall, fraternity, or sorority house. Approximately 15,000 University of Arkansas undergraduate students live off-campus. This group of students is extremely broad, ranging from teenagers to senior citizens. There are traditional-aged students, as well as nontraditional student and adult learners who meet one or more of the following criteria: age 24-plus, married, with dependents, work full-time, part-time student, financially independent, non-traditional high school diploma, interrupted higher education. Some off-campus students live close to the university and some commute from hours away. Some participate in alternative delivery or online classes, so they may seldom visit campus at all.

Off Campus Connections assists in student retention efforts by providing information, referrals, support, and recognition to students who are living off campus. Peer Assistance Leader Students (PALS) are trained to assist their fellow students. PALS can provide helpful information and answer many questions, so students should not hesitate to take advantage of their knowledge.

Finding a place to live is a basic need. To facilitate the housing search, http://offcampushousing.uark.edu is a searchable website provided free of charge for current and prospective students. The area properties listed on the website are interested and normally experienced in having student tenants. A very popular Off-Campus/Commuter Meal Plan is available to students through Chartwells Campus Dining Service.

Campus involvement is important, especially for off-campus students. Students who are involved or work on campus are more likely to graduate. To encourage student involvement, timely information about deadlines, campus life and other pertinent events are shared through weekly e-mail announcements. A friendly and comfortable
Commuter Lounge is located on the Sixth Floor West of the Arkansas Union. Off Campus Connections’ desire is for each student to feel a part of the university and earn a degree from the University of Arkansas.

For further information, visit the Off Campus Connections Web site at http://occ.uark.edu/ or send an e-mail to occ@uark.edu. Students may also visit the office in Arkansas Union Room 632 or contact the OCC by telephone at 479-575-7351. In order to provide better customer service, appointments are appreciated and may be made in advance from the OCC website.

**Veteran Resource and Information Center**

The University of Arkansas Veterans Resource and Information Center ensures the academic and professional success of student veterans by understanding their unique needs and by serving as a central point of contact into a seamless collaboration between prospective and current student veterans, the University of Arkansas, the U.S. Department of Veterans Affairs, and a diverse network of community partners.

Veterans and dependents of service members may be eligible to receive monthly educational assistance from the Veterans Administration while enrolled at the University of Arkansas. For more information, including GI Bill eligibility, contact the Veterans Resource and Information Center at vrc@uark.edu or 479-575-8742. Students may also visit the center in Arkansas Union Room 632 or online at http://veteranscenter.uark.edu/

**Student Ombuds Services**

EDITOR’S NOTE: The Division of Student Affairs eliminated the office of Student Ombuds Services after the Undergraduate Catalog of Studies went to press, but this online PDF version has been updated to reflect its removal.

**Reasonable Accommodations for Students with Disabilities**

The Center for Educational Access (CEA), 104 Arkansas Union, is the central campus resource for students who require reasonable accommodations in order to access the programs, services and activities offered through the University. CEA staff work in partnership with the individual student to communicate and facilitate any accommodation needs to faculty and staff. Accommodation determination is based on an analysis of medical or psychological documentation provided to the CEA by the student. Students must meet with one of the CEA staff to discuss their needs and provide such documentation before any accommodations can be granted.

To register for services or for more information, contact the Center for Educational Access, University of Arkansas, 104 ARKU, Fayetteville, AR 72701, phone 479-575-3104 (voice) or 479-575-3646 (TTY); e-mail: ada@uark.edu; Web: http://www.uark.edu/us/csd/.

**Office of Academic Integrity and Student Conduct**

The mission of the Office of Academic Integrity and Student Conduct (OAISC) is to provide an equitable and effective educational system that promotes responsibility, individual growth, accountability, and student learning through community outreach, peer mentoring, and enforcement of the Code of Student Life. The Office of Academic Integrity and Student Conduct is designed to provide an equitable process for addressing alleged infractions of University policies, regulations, and/or laws by students. This system is informal, non-adversarial, and intended to be a part of the overall educational process. Students are encouraged to make responsible decisions and to be accountable for their actions. In addition, students who witness violations of the Code of Student Life or the Academic Integrity policy or who are victims of inappropriate or illegal behavior perpetrated by other students are encouraged to report such activity to the Office of Academic Integrity and Student Conduct.

Students who are interested in involvement with the All-University Conduct Board or the All-University Academic Integrity Board should contact the director of OAISC at judicial@uark.edu or honesty@uark.edu. The All-University Conduct Board comprises faculty, staff, and students and is responsible for the adjudication of cases of alleged student misconduct as outlined in the Code of Student Life. The All-University Academic Integrity Board comprises faculty and students and is responsible for the adjudication of cases of alleged violations of the Academic Integrity policy.

Both of these boards are advanced leadership opportunities for students who would like to gain valuable experience working with faculty and staff on an impartial peer review board.

For more information regarding the Code of Student Life, please see the Student Handbook at http://handbook.uark.edu. For more information regarding the Academic Integrity policies, please review the Provost’s website at http://provost.uark.edu/. The Office of Academic Integrity and Student Conduct is located in the Arkansas Union Room 634, phone 479-575-5170; Web: http://ethics.uark.edu/.

**UNIVERSITY CAREER DEVELOPMENT CENTER**

The University Career Development Center helps students achieve great job search results. Students can take advantage of the center’s valuable resources:

- **Career Advising:** Advisers in the CDC are available to assist students who may need help selecting a college major, looking for career information, researching or exploring careers, preparing for their job search or considering a graduate school.

- **Career and Strength-Awareness Assessments:** The STRONG Interest Assessment, Focus 2 and TypeFocus are career assessments that can help students make career decisions based on their interests and values. StrengthsQuest is an assessment which helps individuals discover their talents and strengths. After discovering talents, the Career Center assists students in learning how to use their talents to achieve academic, career, and personal success.

- **Career Fairs:** In partnership with academic areas on campus, the CDC hosts a number of career fairs is offered each year to provide opportunities for students to connect with employers and to learn more about companies and organizations. These connections could lead to valuable internships or full-time employment.

- **Job Search Preparation:** The CDC offers resume critiques, interview skills training, mock interview, networking opportunities, and several professional development events throughout the academic year to prepare students for internships, co-ops or full-time jobs.

- **Cooperative Education Opportunities:** Cooperative Education is a program that enables students to gain professional work experience in paid, degree-related positions. Co-op students earn credit, a competitive wage and valuable “real world” work experience.

- **Internet Job Search Resources:** Through the CDC’s website, students are able to access a number of job search sites. These resources enable University of Arkansas students to apply for jobs online and to sign up for on-campus interviews.

- **Professional Development Institute:** This nationally recognized program creates opportunities for UA students to develop professional career-building skills. Participation in this program can help students gain the valuable skills which give them the competitive advantage in their job or graduate school search.

For more information, check out career.uark.edu.

The University Career Development Center is conveniently located in Arkansas Union Room 607, or call 479-575-2805.
UNIVERSITY HEALTH CENTER

Pat Walker Health Center

The Pat Walker Health Center, an AHAAC accredited medical institution, provides professional and comprehensive medical care, mental health care, health education, and health promotion for the University of Arkansas community including students, faculty, and staff. Committed to physical, mental, spiritual, emotional, and social health, the highest standards of quality, and an appreciation of the value of each individual, the Pat Walker Health Center's services and programs support the education and development of each individual.

The current facility opened in November 2004 with expanded services for the University of Arkansas community. Students pay a small fee to help cover the cost of the new building and a per credit hour semester health fee that covers professional office visits. Student spouses are eligible for services and may elect to pay the health fee. Services other than professional office visits are the responsibility of the patient and/or their health insurance plan. The University strongly recommends that all students maintain health insurance. A student health insurance policy is available to all students, student spouses, and their dependent children. Students may enroll in this plan at the Pat Walker Health Center.


Pat Walker Health Center services include:

Medical Services

Professional medical staff, including physicians, nurse practitioners and registered nurses, provide primary health care as well as women's health care. An allergy clinic and a travel immunization clinic are also available in addition to the services with a psychiatrist, orthopedist and a dietician. The Pat Walker Health Center is particularly advantageous to the campus community with a comprehensive clinical laboratory and X-ray facilities.

Counseling and Psychological Services

Counseling and Psychological Services (CAPS) provides a wide range of consultations to students, students' partners, staff, and faculty of the University of Arkansas. Psychologists, social workers, a psychiatrist, and professional counselors work with students to solve problems, understand themselves, grow personally, and develop more satisfying relationships with friends and family. In addition to office consultations and therapy sessions, students have opportunities to participate in educational programs on campus as well as access to 24-hour services for mental health crises. To access daily walk-in services or 24-hour emergency services, call 479-575-5276.

Health Promotion and Education

A unique feature of the Pat Walker Health Center is the complete focus on the promotion of good health and prevention of negative health conditions. Professional health educators serve the campus community with wellness and prevention activities delivered in a variety of educational settings including individual consultations, group presentations, awareness events, outreach activities, one-hour credit classes, and a variety of other educational programs. Students benefit from the breadth of health and lifestyle topics addressed, which help them attain success in all aspects of their lives.

UNIVERSITY HOUSING

University Housing is committed to providing a quality living and learning environment that both challenges and supports the personal, social, and academic development of our residents and their diverse communities.

National research has shown that academic success in the first year and beyond is directly linked to residing in an on-campus residence environment. The University of Arkansas recognizes the benefits that students receive from living on campus their first year. Therefore, all single students who are admitted to the University with a freshmen classification and under 21 years of age are required to live on campus in a residence hall, or in their parent or legal guardian's permanent home. Students who are admitted to the University of Arkansas as transfer students from another post-secondary institution, and who have completed at least 24 credit hours at that institution are not required to live on campus.

Requests for a newly admitted freshmen to live somewhere other than with parents or a legal guardian in their permanent home are not likely to be approved under most circumstances. Students planning to live with their parents or legal guardian in their permanent home should complete the Living with Parent Notification Form prior to attending an orientation session. Students requesting an exemption from the University of Arkansas Freshmen Residency Requirement should send all required paperwork to University Housing at least three weeks prior to attending an orientation session to ensure the student receives approval or denial prior to attending orientation. Failure to do so could cause long delays in the orientation process. Students needing a Living with Parent Notification Form or who wish to apply for an exemption to the University's requirement for single freshmen to live on campus may refer to the information on the Housing Web site: http://housing.uark.edu/forms2/.

Residence Halls are managed by a full-time Coordinator for Residence Education who has completed a master's degree program in higher education, counseling or a related degree. This individual is selected for his or her academic credentials and interest in helping others as well as his or her ability to work well with college students. In addition, every area or floor is staffed by a Resident Assistant who is an upperclass student with training, experience, and knowledge to answer students' questions and, more importantly, to help students find their own answers. Counselors in Residence (graduate assistants) provide short-term counseling for students living in the residence halls in response to personal, social, academic, and developmental needs.

University Housing offers innovative Living/Learning Communities for University of Arkansas students. These Living/Learning Communities comprise major- or discipline-specific Academic Learning Teams as well as more general and exploratory Thematic Learning Communities. These opportunities have been designed to help students in their transition to college, to fit their interests and needs, and to help them achieve success academically and socially. Most importantly, students get to live with peers who have similar interests, majors, or career plans. Members of Living/Learning Communities have the chance to get to know faculty on a personal level and develop strong friendships with fellow students. Living/Learning Communities cost nothing extra, and residents have the opportunity to participate in fun experiences that connect learning in and out of the classroom.

Living options include traditional halls, suites and apartments with designations of single-gender or co-ed. Rooms are available for visually or hearing-impaired students as well as those who are physically challenged. Residence hall entry/exit doors are secured and/or monitored 24 hours a day. Some entries are unlocked to accommodate offices housed in our facilities and classes that are held in our classrooms. Most, but not all, of these areas have interior doors that secure the living floors. Residents are provided access via an electronic access system. Students should be careful not to allow non-residents to follow them into their residence hall. Residents are provided access via a fob issued when they check-in. Students are responsible for escorting all visitors and guests at all times.

Each of the three separate dining facilities on campus is managed by Campus Dining Services and provides a natural setting for socializing with friends and enjoying a wide variety of high quality, nutritious meals. All students living in a residence hall, except those residing in summer school housing, are required to have a meal plan. There are several meal plans available to meet the needs of both on-campus and off-campus students. Learn more about Campus Dining Services online at http://dineoncampus.com/razorbacks.

ARKANSAS UNION

The Arkansas Union seeks to support unique and diverse programs, provide professional services, and satisfy the ever-changing needs of students, faculty, staff, alumni, and guests.

Tenets

Staff and students involved with the Arkansas Union pursue the following positions with regard to:

- Facilities – Offer a welcoming and inviting facility that provides a functional and exciting “Woo Pig Sooie” atmosphere for all Union constituents
• Services – Promote student admission and retention by offering services, conveniences and amenities, while also serving the larger University of Arkansas community

• Program Support – Support departments and organizations in promoting the growth and development of students through civic, cultural, educational, social, and recreational programs

The Arkansas Union serves as the community center of the University for all members of the college family. As the “living room” of campus, the Union is the gathering place of the college. The Union provides services and conveniences that members of the campus community need in their daily lives and creates an environment for getting to know and understanding others through formal and informal associations. Located inside the Union are:

• Veterans Resource and Information Center
• Office of Academic Integrity and Student Conduct
• Volunteer Action Center
• Student Ombuds Office
• Campus Card Office
• Associated Student Government
• Arkansas Union Administration/Reservation Services
• National Pan-Hellenic Council, and the Panhellenic Council.
• Multicultural Center
• New Student and Family Programs
• Off Campus Connections
• Career Development Center
• Center for Educational Access
• Greek Life
• Multicultural Center
• New Student and Family Programs
• Off Campus Connections
• Office of Academic Integrity and Student Conduct
• Student Activities
• Student Ombuds Office
• Treasurer’s Office and Student Accounts
• University Productions
• Veterans Resource and Information Center

The Arkansas Union is the center of student activity and is a perfect place for students to get involved on campus. The Union is a student-centered organization that values participatory decision-making. Through volunteerism, committees, and student employment, the Union offers first-hand experience in citizenship and educates students in leadership, social responsibility, and values. As the center of the college community life, the Union complements the academic experience through an extensive variety of cultural, educational, social, and recreational programs. These programs offer the opportunity to balance coursework and free time as cooperative factors in education. The Union supports these departments and programs by hosting these events. In addition, housed within the Union are 14 offices dedicated to providing programs and services to students.

Student Services

<table>
<thead>
<tr>
<th>Retail Outlets</th>
<th>Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM’s (various banks)</td>
<td>24-hour computer lab</td>
</tr>
<tr>
<td>Catering and Dining Services</td>
<td>Anne Kittrell Art Gallery</td>
</tr>
<tr>
<td>Club Red Convenience Store</td>
<td>Ballroom</td>
</tr>
<tr>
<td>First Security Bank</td>
<td>Banquet rooms</td>
</tr>
<tr>
<td>PMC - Drop-Off Copy Center</td>
<td>Lounges</td>
</tr>
<tr>
<td>Razorback Shop</td>
<td>Meeting rooms</td>
</tr>
<tr>
<td>RZ’s Coffeehouse*</td>
<td>U.S. Post Office</td>
</tr>
<tr>
<td>El Grande Rojo Taqueria</td>
<td>Union Information Center</td>
</tr>
<tr>
<td>Burger King*</td>
<td>Union Theatre</td>
</tr>
<tr>
<td>Mama Leone’s Pizza &amp; Pasta</td>
<td>Union Programs Theater</td>
</tr>
<tr>
<td>The Diner</td>
<td>University Recreation Fitness Center</td>
</tr>
<tr>
<td>Au Bon Pain Soups &amp;</td>
<td></td>
</tr>
<tr>
<td>Garden Emportium Salads</td>
<td></td>
</tr>
</tbody>
</table>

The purpose of the Center for Community Engagement (CCE) is to promote civic engagement and leadership by connecting University of Arkansas students, faculty and staff with nonprofit organizations in the Northwest Arkansas area and beyond.

In order to serve this purpose, the CCE maintains volunteer.uark.edu which enables volunteers to search for agencies and service projects. It allows users to log service hours and earn opportunities for community recognition, such as the Presidential Service Award. Northwest Arkansas agencies and University of Arkansas registered student organizations also utilize the site to post service opportunities and recruit volunteers. Over 170 organizations are registered on the site, such as Habitat for Humanity, the U of A Friday Night Live program and Potter’s House Thrift.

Volunteer Action Center

The Center for Community Engagement also houses the Volunteer Action Center, a student led volunteer coordination board with 30 members who are dedicated to active service in the community. Each year the VAC provides meaningful service opportunities through events and ongoing projects that engage the university and NWA communities. VAC sponsors programs and events including the Full Circle Food Pantry, Make a Difference Day, and the MLK Day of Service. Full Circle Campus Food Pantry is the newest program of the Volunteer Action Center Board; the pantry serves students, staff and their families. Requests and more information can be found at http://fullcircle.uark.edu.

Get involved in the following ways:

• Drop by the Center for Community Engagement, Arkansas Union, Room A643, and chat with the office’s great staff and students.
• Look for service opportunities on volunteer.uark.edu and log your hours. Just one hour makes you a VAC volunteer.
• Participate in events hosted by VAC and CCE throughout the year.
• Become a Volunteer Action Center board member. Applications are accepted annually.

Greek Life

The Office of Greek Life facilitates the educational process and provides resources related to programs that strengthen the growth and development of students affiliated with fraternities and sororities on campus. The overall mission is to strengthen the academic, cultural, moral, and social development of students in Greek organizations; provide training in strengths-based leadership and other personal and social skills; promote involvement in extracurricular activities and community service projects; and promote Greek Life as a productive and viable lifestyle on campus. The Office of Greek Life coordinates programs such as Recruitment, Greek Getaway, Greek Life Facilitators, and Greek Summit in collaboration with the Interfraternity Council, the National Pan-Hellenic Council, and the Panhellenic Council.

The Interfraternity Council (IFC), National Pan-Hellenic Council (NPHC), Panhellenic Council (PHC) and Multicultural Greek Council govern 12 national sororities and 17 fraternities. The officers and representatives of each council work with the Office of Greek Life to provide positive programs and strengths-based leadership opportunities to the members of the Greek organizations. The Greek Life office is in the Arkansas Union A687; phone 479-575-5001 or fax 479-575-3531; Web: uagreeks.uark.edu.

New Student & Family Programs

New Student & Family Programs at the University of Arkansas is a collaborative effort developed to enhance the academic and social integration of incoming students through a variety of classroom and co-curricular activities. The department supports and collaborates on many initiatives including: R.O.C.K. Camp; R.O.C.K. Camp Adventure; Hog W.I.L.D. (Welcome, Involvement, Leadership and Diversity) Welcome Weeks; New Student Assembly & Burger Bash; Help-A-Hog: Friday Night Live; Fall Family Weekend and Spring Family Reunion; Leadership Programs including Emerg-
Student Activities
With a students-first philosophy, the Office of Student Activities provides an environment for involvement, empowerment, and collaboration through student organizations, programmatic experiences, and shared governance. The office maximizes the UA experience by advocating for all students, promoting intercultural understanding, and developing citizens who are prepared to positively impact their communities.

The Office of Student Activities, located in the Arkansas Union A665, is the central location for student organizations and activities for the University. The Office of Student Activities is responsible for the oversight and administration of the following areas:

Student Organizations
All student organizations must register annually with the Office of Student Activities. The Office of Student Activities provides student organizations with assistance and services to help them succeed, including the annual Student Involvement Fair known as Razorbash, information on facility reservations and fund-raising, trademark forms, mailboxes, and locker space. The office also assists student organizations in event planning, provides educational workshops for students and advisors, and conducts retreats for student organizations. A limited number of offices are also awarded annually in the Arkansas Union to organizations.

Types of Registered Student Organizations (RSOs):
- Governing – An organization whose primary purpose is to serve as a governing body for a large or specific constituency of students.
- Greek – An organization with Greek letters who is a member of the National Inter-Fraternity Council, the Pan-Hellenic Council, or the National Pan-Hellenic Council.
- Honorary/Service – An organization that requires a minimum grade point average as a prerequisite to membership and/or is affiliated with a national service or honorary organization.
- International/Cultural – An organization whose primary purpose is to provide a forum in which participants create awareness for a specific culture through educational, social, and recreational activities.
- Professional – An organization whose primary purpose is to provide a forum for participants to discuss and develop professional careers and/or is affiliated with a national or regional association.
- Religious – An organization whose primary purpose is to provide information and activities associated with one or more religions.
- Special Interest – An organization whose primary purpose is to provide an organized format for the practice and/or pursuit of a special or common interest.

Associated Student Government
The Associated Student Government (ASG) provides important services to the University community and is an integral part of the shared campus governance system. Associated Student Government is a student-led organization that enables students to have an active voice in the decisions and policy that directly affect all students at the University of Arkansas. Students involved in Associated Student Government have the opportunity to positively impact the quality of student life, work with and allocate student fees, provide a voice for student concerns as well as oversee programs and policies for all students. Through the executive, legislative and judicial branches of student government, students have the opportunity to work for and among their peers to make a difference on all levels of the University. Involvement levels and time commitment vary upon duties. Visit the student government website at http://asg.uark.edu or the Associated Student Government office (ARKU A669) to find out more.

University Programs
University Programs is a volunteer student organization responsible for planning and coordinating more than 150 events annually for the campus community. University Programs provides students with cultural and educational experiences, entertainment, and fun. Seven committees, all made up of students, select, schedule and produce events such as concerts, movies, lectures, fine arts performances, gallery exhibitions, and daytime programs. Being a part of University Programs gives the student committee members leadership training and real opportunities to gain practical planning experience. Supported by a student activity fee, University Programs events are free to students.

For further information, visit our website at http://upa.uark.edu/.

Student Media
The Office of Student Media administers and advises the official student media outlets of the University. These outlets are: the student newspaper, The Arkansas Traveler; the University of Arkansas yearbook, The Razorback; the student television station, UATV; and the student radio station, KXUA. All provide a forum for student expression, entertainment, news and information of interest to the campus community. Other than a small support staff, these groups are entirely staffed by student employees and volunteers, including editors and station managers. For more information, contact Student Media at 479-575-3406.
Honors College

Honors College Office
418 Administration Building, 479-575-7678

Dean
Robert C. McMath

Associate Dean
Carol Gattis

Academic Scholarship Office
101 Old Main, 479-575-4464

Advanced Placement Summer Institute
418 Administration Building, 479-575-7678

World Wide Web:
http://honorscollege.uark.edu/
E-mail: honors@uark.edu

MISSION AND OBJECTIVES

The Honors College at the University of Arkansas brings together more than 2,400 high-achieving students and 300 of the University’s top faculty members in a learning environment characterized by discovery, creativity, and service. Founded in 2002 by a $200 million gift from the Walton Family Charitable Support Foundation, the Honors College has the nation’s largest endowment for undergraduate research and study abroad at a public university. The mission of the Honors College is to create a vibrant, campus-wide learning community that fosters the pursuit and application of knowledge among undergraduates. To achieve this mission, the Honors College focuses on providing transformative educational experiences through interdisciplinary learning, study abroad and real-world research, and cultivating a diverse body of honors students who work comfortably in challenging environments to address crucial issues locally and globally. The Honors College encompasses the honors programs from each undergraduate college or school.

FACILITIES AND RESOURCES

The Dean’s Office is housed on the fourth floor of the Administration Building, alongside a computer lab equipped with the latest technology and a coffee lounge where students gather to study individually or in groups. Honors lounges are also available throughout campus where the college honors programs are housed. Smartrooms, classrooms outfitted with state-of-the-art computers, projectors, document cameras, and media equipment, are available in many of the buildings across campus — Old Main, William Walker Hall, J.B. Hunt Transport Services Center for Academic Excellence, Science and Engineering Building, Science Building, Fine Arts Center, Memorial Hall, Ozark Hall, Chemistry Building, and Kemp Hall.

In partnership with Quaneris, the Honors College has developed an innovative computer lab with twenty 24-inch iMacs, each fully loaded with the latest operating systems for Mac and Windows, Adobe Creative Suite 4, iWorks, and Microsoft Office for Mac. Beginning in 2013, the Honors College will be housed in a new wing of historic Ozark Hall, located in the heart of campus.

DEGREES OFFERED

Honors programs are offered in all disciplines, tailored to students’ academic interests, with interdisciplinary collaborations encouraged. The college or school of major confers honors degrees. Students must be members of the Honors College to graduate with the distinction of summa, magna, or cum laude.

OTHER PROGRAMS

Honors College Grants
Each year the Honors College awards from $500,000 to $1 million in study abroad and undergraduate research grants, which are available to honors students who submit competitive proposals and meet all other requirements. Honors College faculty and staff work closely with the Office of Study Abroad and International Exchange to help honors students find programs that meet their academic and professional goals. Research grants support laboratory or creative work and travel to an archive or conference. Deadlines and application instructions are available on the Honors College website at http://honorscollege.uark.edu.

Celebrating Discovery
Honors students have the opportunity to travel to their hometowns high school to present research findings. Students may be from any discipline.

Nationally Competitive Awards
The Honors College associates with the Office of Nationally Competitive Awards to provide assistance to all students who are applying for national and international graduate fellowships and scholarships (i.e. Marshall, Rhodes, Gates Cambridge, Rotary, Fulbright, and National Science Foundation). For more information, refer to the Enrollment Services section of this catalog.

Advanced Placement Summer Institute
The Honors College coordinates the annual Advanced Placement Summer Institute (APSI), a College Board endorsed summer program that typically lasts for four days in July. The institute provides training to high school and middle school teachers for AP certification in various subjects. Course listings and registration information is available at http://apsi.uark.edu.

COLLEGE ADMISSION REQUIREMENTS

To sign up for honors, new freshmen go to orientation and attend the honors meeting for their college or school of major. At the meeting, the student fills out an honors request form. After the form is processed, the student is in the honors program and eligible to take honors courses. The chart below contains basic requirements for each of the honors programs. For detailed information, see the individual honors program sections for each college or school in this catalog. Current students who are eligible should contact the appropriate honors program to request honors status.

COLLEGE SCHOLARSHIPS

The Honors College administers the most prestigious new freshman award at the University of Arkansas. The Honors College and Bodenhamer Fellowships, which provide $50,000 over a four-year period, are highly competitive and require an in-depth application process and interview. For more details, visit the Honors College website at http://honorscollege.uark.edu and click on Prospective Students. The Academic Scholarship Office awards scholarships to a variety of students. Students do not have to be in the Honors College to receive many of these scholarships. For additional information, visit the Academic Scholarship Office website at http://scholarships.uark.edu and see the chapter on Financial Aid and Scholarships in this catalog.

STUDENT ORGANIZATIONS

All honors students are eligible to join the Honors College Ambassadors, a group with no membership fees or dues. The Honors College Ambassadors support the honors community by participating in campus recruiting events and meeting with prospective students.

COLLEGE ACADEMIC REGULATIONS

The college or school of major sets specific requirements for graduating with honors including a minimum of 12 honors credit hours and the completion of an undergraduate thesis. A combination of honors credit hours, thesis quality, and GPA requirements (minimum 3.5) lead to Latin designations of cum laude, magna cum laude, or summa cum laude. Registration for honors courses is restricted to honors students or other students who meet the honors criteria and who have been approved by the honors program offering the course. For more information, see the honors sections for the college or school major.

To sign up for honors, new freshmen go to orientation and attend the honors meeting for their college or school of major. At the meeting, the student fills out an honors request form. After the form is processed, the student is in the honors program and eligible to take honors courses. The chart below contains basic requirements for each of the honors programs. For detailed information, see the individual honors program sections for each college or school in this catalog. Current students who are eligible should contact the appropriate honors program to request honors status.

### College or School

<table>
<thead>
<tr>
<th>College or School</th>
<th>New Freshmen</th>
<th>Current Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulbright College of Arts and Sciences</td>
<td>Minimum 28 ACT or SAT Critical Reading</td>
<td>3.5 cumulative University of Arkansas GPA</td>
</tr>
<tr>
<td>Roy J. and液cia School of Architecture</td>
<td>Math score of 1240</td>
<td></td>
</tr>
<tr>
<td>College of Education and Health Professions</td>
<td>and 3.5 high school GPA</td>
<td></td>
</tr>
<tr>
<td>College of Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ruppersberg College of Agricultural, Food and Life Sciences</td>
<td>Minimum 28 ACT or SAT Critical Reading</td>
<td>3.5 high school GPA</td>
</tr>
<tr>
<td>Walton College of Business</td>
<td>Math score of 1240</td>
<td></td>
</tr>
<tr>
<td>and 3.75 high school GPA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Honors College Grants

Each year the Honors College awards from $500,000 to $1 million in study abroad and undergraduate research grants, which are available to honors students who submit competitive proposals and meet all other requirements. Honors College faculty and staff work closely with the Office of Study Abroad and International Exchange to help honors students find programs that meet their academic and professional goals. Research grants support laboratory or creative work and travel to an archive or conference. Deadlines and application instructions are available on the Honors College website at http://honorscollege.uark.edu.

### Celebrating Discovery

Honors students have the opportunity to travel to their hometowns high school to present research findings. Students may be from any discipline.

### Nationally Competitive Awards

The Honors College associates with the Office of Nationally Competitive Awards to provide assistance to all students who are applying for national and international graduate fellowships and scholarships (i.e. Marshall, Rhodes, Gates Cambridge, Rotary, Fulbright, and National Science Foundation). For more information, refer to the Enrollment Services section of this catalog.

### Advanced Placement Summer Institute

The Honors College coordinates the annual Advanced Placement Summer Institute (APSI), a College Board endorsed summer program that typically lasts for four days in July. The institute provides training to high school and middle school teachers for AP certification in various subjects. Course listings and registration information is available at http://apsi.uark.edu.

### COLLEGE ADMISSION REQUIREMENTS

To sign up for honors, new freshmen go to orientation and attend the honors meeting for their college or school of major. At the meeting, the student fills out an honors request form. After the form is processed, the student is in the honors program and eligible to take honors courses. The chart below contains basic requirements for each of the honors programs. For detailed information, see the individual honors program sections for each college or school in this catalog. Current students who are eligible should contact the appropriate honors program to request honors status.

### COLLEGE SCHOLARSHIPS

The Honors College administers the most prestigious new freshman award at the University of Arkansas. The Honors College and Bodenhamer Fellowships, which provide $50,000 over a four-year period, are highly competitive and require an in-depth application process and interview. For more details, visit the Honors College website at http://honorscollege.uark.edu and click on Prospective Students. The Academic Scholarship Office awards scholarships to a variety of students. Students do not have to be in the Honors College to receive many of these scholarships. For additional information, visit the Academic Scholarship Office website at http://scholarships.uark.edu and see the chapter on Financial Aid and Scholarships in this catalog.

### STUDENT ORGANIZATIONS

All honors students are eligible to join the Honors College Ambassadors, a group with no membership fees or dues. The Honors College Ambassadors support the honors community by participating in campus recruiting events and meeting with prospective students.

### COLLEGE ACADEMIC REGULATIONS

The college or school of major sets specific requirements for graduating with honors including a minimum of 12 honors credit hours and the completion of an undergraduate thesis. A combination of honors credit hours, thesis quality, and GPA requirements (minimum 3.5) lead to Latin designations of cum laude, magna cum laude, or summa cum laude. Registration for honors courses is restricted to honors students or other students who meet the honors criteria and who have been approved by the honors program offering the course. For more information, see the honors sections for the college or school major.

### MISSION AND OBJECTIVES

The Honors College at the University of Arkansas brings together more than 2,400 high-achieving students and 300 of the University’s top faculty members in a learning environment characterized by discovery, creativity, and service. Founded in 2002 by a $200 million gift from the Walton Family Charitable Support Foundation, the Honors College has the nation’s largest endowment for undergraduate research and study abroad at a public university. The mission of the Honors College is to create a vibrant, campus-wide learning community that fosters the pursuit and application of knowledge among undergraduates. To achieve this mission, the Honors College focuses on providing transformative educational experiences through interdisciplinary learning, study abroad and real-world research, and cultivating a diverse body of honors students who work comfortably in challenging environments to address crucial issues locally and globally. The Honors College encompasses the honors programs from each undergraduate college or school.
MISSION AND OBJECTIVES

The University provides several options for students to pursue education more broadly than one field of undergraduate study might allow, including interdisciplinary and multidisciplinary programs. These programs allow broader instruction and research opportunities, especially in emerging fields that haven't reached the academic breadth to constitute a full academic department or in cases in which collaboration between one or more departments allows faculty from each existing department to contribute to the interdisciplinary or multidisciplinary major. In the Catalog of Studies, requirements for each interdisciplinary program are listed in the chapter of the college or school that oversees the program.

Two interdisciplinary minors — Microelectronics-Photonics and Sustainability — are not administered by an academic department. The minor in Microelectronics-Photonics is administered by the Division of Interdisciplinary Studies in the Graduate School. The minor in Sustainability is administered by the Provost’s Office. The requirements for completing each minor are listed below.

MICROELECTRONICS-PHOTONICS (MEPH)

Ken Vickers
Program Director
248 Physics
479-575-2875

Russell DePriest
Assistant Program Director for microEP minor
131 Engineering Hall
479-575-4719
microep@cavern.uark.edu
http://microEP.uark.edu

Biological and Agricultural Engineering Faculty:
• Professor Li
• Assistant Professors Jin, Kavdia, Kim, Ye

Chemical Engineering Faculty:
• Professors Beitle, Ulrich
• Associate Professor Roper
• Assistant Professors J. Hestekin (J.), Servoss

Chemistry Faculty:
• Professors Fritsch, Peng, Stenken
• Assistant Professors Tian, Chen

Civil Engineering Faculty:
• Professor Selvam

Computer Science/Computer Engineering Faculty:
• Assistant Professor Di

Electrical Engineering Faculty:
• Distinguished Professors Varadan (VK), Varadan (VV)
• Professors Ang, Balda, Manasreh, Mantooth, Naseem
• Associate Professor El-Shanawee
• Assistant Professors Ji, Yu
• Research Professor Lostenetter
• Research Associate Porter

Mechanical Engineering Faculty:
• Professors Gordon, Malshe
• Associate Professors Tung, Zou
• Assistant Professors Huang, Speareet, Wejinya

Microelectronics-Photonics Faculty:
• Research Assistant Professor Benamara
• Adjunct Professors DePriest, Foster

Physics Faculty:
• Distinguished Professors Salamo, Xiao
• Professors Bellaiche, Singh
• Research Professor Vickers
• Associate Professors Fu, Oliver
• Assistant Professors Gross, Li, Tchakhalian

Microelectronics-Photonics (microEP) is an interdisciplinary program based in the Division of Interdisciplinary Studies in the Graduate School that prepares students for careers involving micro/nano materials, processing, and devices applied in areas such as photonics, microelectronics, bio/chemical analysis, etc. The microEP Graduate Program offers M.S. and Ph.D. degrees, as well as an undergraduate minor in Microelectronics-Photonics.

The purpose of this minor is to allow undergraduates in science and engineering to be able to capitalize on the research and educational core of the microEP Graduate Program as they prepare to enter the job market or compete for positions in top level graduate programs.

Requirements for a minor in Microelectronics-Photonics: Three hours of required courses (One of INEG 4323, INEG 4433, or INEG 4443). At least 12 additional hours must be taken from the following undergraduate courses (BENG 4123, CHEM 4213, ELEG 4203, ELEG 4223, MEEG 4303, MEPH 488V, PHYS 3603, PHYS 4713, and PHYS 4213), or from other appropriate courses not on this list if approved first by the microEP Program and by the course instructor. See examples at the microEP Web site.

Students accepted into the microEP minor must attend an orientation session at the beginning of each semester as well as the monthly microEP graduate student research presentations. Students enrolled in the microEP minor must attend at least one public presentation of a Master of Science thesis in microEP or a Doctor of Philosophy dissertation in microEP each semester. Students wishing to declare this minor must apply through the microEP Program Web site, http://microEP.uark.edu, and be accepted into the minor at least two regular semesters before their graduation date.
The minor in Sustainability is interdisciplinary, drawing from faculty and course work across all colleges of the University of Arkansas. The minor is accessible to all undergraduate students, regardless of degree program. The purpose of the minor in Sustainability is to provide foundational knowledge and skills related to the emerging discipline of sustainability, organized around four thematic areas reflecting strength in scholarship of University of Arkansas academic colleges: Sustainability of Social Systems, Sustainability of Natural Systems, Sustainability of Built Systems, and Sustainability of Managed Systems. Students who complete the minor in Sustainability will be expected to:

- Articulate commonly accepted definitions of sustainability and discuss various nuances among those definitions;
- Have an understanding of the interdisciplinary nature of sustainability issues, particularly as they pertain to the thematic areas of knowledge addressed by the minor (sustainability of natural systems, sustainability of managed systems, sustainability of built systems, and sustainability of human social systems);
- Be conversant regarding acquisition and analysis of data pertinent to sustainability issues;
- Communicate orally and in writing organized thoughts defining sustainability issues;
- Identify appropriate potential strategies to address sustainability issues using data and provide results of rudimentary analyses of data using novel metrics or statistics;
- Make recommendations, based on data analysis and interpretation, to advance sustainability of individuals or institutions.

### Required Courses for a Minor in Sustainability

Students must earn a grade of ‘C’ or better for all courses used to fulfill requirements of the minor in Sustainability.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUST 1103</td>
<td>Fundamentals of Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>SUST 2103</td>
<td>Applications of Sustainability</td>
<td>3</td>
</tr>
</tbody>
</table>
Interdisciplinary Studies

**Sustainability of Managed Systems courses**

**Tier 1**
- AGEC 3413 Principles of Environmental Economics (AGEC 1103 or ECON 2023)
- AGEC 3523 Environmental and Natural Resource Law
- AGED 4003 Issues in Agriculture Junior standing
- CSES 3214 Soil Resources and Nutrient Cycles with lab (CSES 2203)
- ECON 3843 Economic Development, Poverty, & the Role of the World Bank and IMF in Low-Income Countries (ECON 2013 and ECON 2023, or ECON 2143)
- ENSC 3103 Plants and Environmental Restoration (CSES 1203 or HORT 2003 or BIOL 1613)
- ENSC 3223/3221L Ecosystems Assessment and lab (BIOL 1543, CSES 2203, and ENSC 3003)
- ENSC 3263 Soil and Water Conservation with lab component (CSES 2203)
- ENSC 4023 Water Quality with lab component (CHEM 1123/1CHEM 1121L)
- ENSC 4263 Environmental Soil Science (CSES 3214)
- HORT 3503 Sustainability and Organic Horticulture (suggested but not required: BIOL 1613, CSES 1203, CSES 1003, or HORT 2003)
- WCOB 3023 Sustainability in Business (junior standing)

**Tier 2**
- AGED 4443 Methods of Technological Change (junior standing)
- AGME 1613 Fundamentals of Agricultural Systems Technology with lab component
- CSES 2012 Organic Crop Production
- CSES 2203/2201L Soil Science with drill (CHEM 1103 or CHEM 1073)
- ENSC 1003 Environmental Science
- MGMT 4243 Ethics and Corporate Responsibility (junior standing)

**Sustainability of Built Systems courses**

**Tier 1**
- ARCH 4023H Sustainability and Design Permission of instructor
- CVEG 488V Sustainability in Civil Engineering (CVEG majors)
- GEOG 4383 Hazard Assessment and Risk Policy (junior standing)
- INEG 4583 Renewable Energy: Green Power Sources (Senior standing)
- MEEG 4453 Industrial Waste and Energy Management (MEEG 4413 or equivalent)
- MEEG 4473 Indoor Environmental Design (MEEG 4413 or equivalent)
- LARC 5043 Housing As If The Future Matters
- LARC 5063 Alternative Storm Water Management

**Tier 2**
- GEOG 3543 Geographic Information Science
- GEOG 4063 Urban Geography (junior standing)
- ARCH3134 Building Systems: Lighting, Acoustics, and HVAC (ARCH 2124, Corequisite: ARCH 3016)
- LARC 4743 Site Planning in Landscape Architecture
- CVEG 3243 Environmental Engineering with lab component (MATH 3404 and CHEM 1123)
- CVEG 4243 Environmental Engineering Design (CVEG 3243)
- CVEG 4323 Design of Structural Systems (CVEG 4303 and CVEG 4313)
- CSCE 4233 Low Power Digital Systems (CSCE 2123)

**Sustainability of Social Systems courses**

**Tier 1**
- AGEC 3523 Environmental and Natural Resource Law
- AGEC 4163 Agriculture and Rural Development (AGEC 1103 or ECON 2023)
- COMM 4643 Environmental Communications

**Tier 2**
- ANTH 4143 Ecological Anthropology
- HIST 4773 Environmental History
- CHLP 6553 Environmental Health
- CHLP 4643/5643 Multicultural Health
- SCWK 4093 Human Behavior and Social Environments I (PSYC 2003, SOCI 2013, SCWK 2133, and SCWK 3193 and either BIOL 1543/1541L, or ANTH 1013/1011L)
- SCWK 4103 Human Behavior and Social Environments II (SCWK 4093 and SCWK 4153)
- SCWK 3193 Human Diversity and Social Work
- SOCI 2033 Social Problems
- SOCI 3193 Race, Class, Gender in the U.S. (SOCI 2013)
- SOCI 4013 Special Topics: The City (SOCI 2013)

**Capstone Experience**

All students participating in the minor in Sustainability must complete a capstone experience focused on service learning, research learning, or internship in sustainability. Student engagement in community service, research, or relevant work on sustainability through a summer internship provides opportunities for students to apply sustainability theories and principles learned from prior coursework toward advancing sustainability across society.

Students may formally petition the University of Arkansas Curriculum Steering Committee to substitute sustainability-oriented senior design projects, Honors College research projects, other service learning courses, or equivalent internship experiences for SUST 4103 to satisfy the capstone element of minor in Sustainability. Details of the procedure to substitute alternative experiences for SUST 4103 can be found in the Foundations of Sustainability Program Handbook.

To qualify for SUST 4103 or other sustainability capstone experience, students must have successfully completed SUST 1103, SUST 2103, and 6 hours of elective course work toward the minor in Sustainability.
Dale Bumpers College of Agricultural, Food and Life Sciences

Office of the Dean of the College
E-108 Agricultural, Food and Life Sciences Building, 479-575-2252
Dean
Michael E. Vayda
Associate Dean
Lona J. Robertson
Student Affairs Coordinator
Alice Griffin
Curricular Affairs Coordinator
Kaaron "Jody" Davis
Director of Honors Program
Curt Rom, 479-575-7434
Advising, Scholarships, Student Relations
E-108 Agricultural, Food and Life Sciences Building, 479-575-2252
World Wide Web
http://bumperscollege.uark.edu/
E-mail: afisdean@uark.edu

MISSION AND OBJECTIVES

The mission of the College of Agricultural, Food and Life Sciences is to prepare graduates who are intellectually enriched, technically competent, environmentally conscious, and ethically responsible. We honor the land-grant tradition and respect the many values of its fabric and heritage while demonstrating sensitivity toward change for the future. Our goal is for our graduates to commit to being self-directed, lifelong learners and to be responsible leaders, possessing strong communication skills and problem-solving abilities.

To accomplish this, the broad curricula include basic courses in the general sciences and liberal arts, as well as the agriculture and human environmental sciences.

History and Organization

As the state’s land-grant university, the University of Arkansas has the responsibility for leadership in teaching, research, and service in the agricultural and human environmental sciences. This responsibility is shared with the Division of Agriculture.

The Bumpers College is an integral component of the University of Arkansas and addresses the teaching responsibility of the land-grant university. Its roots lie in the First Morrill Act of 1862, which created the land-grant system by providing a grant of land to each state for the establishment of a college "where the leading objective shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanical arts in such manner as the legislatures of the state may prescribe to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life.” Agricultural sciences have been taught at the University of Arkansas almost from the beginning of the institution in 1872. The University conferred the first degrees in agriculture in 1904.

Early instruction and outreach efforts focused on improving rural life for men, women, and children. Farm wives were interested in beautifying the home, food preparation and safety, and gardening. Foods and nutrition, bacteriology, chemistry, and other related subjects held a common scientific interest for both agriculture and home economics, so it naturally evolved that studies in home economics should develop within the realm of agricultural education. Domestic science classes were offered as early as 1909, and a department of home economics was established in 1913. The department was elevated to school status in 1994, and its name was changed to the School of Human Environmental Sciences.

The passage of the Hatch Act in 1887 and subsequent legislation made possible the Agricultural Experiment Station, the research component of the Division of Agriculture. Most faculty who teach in the Bumpers College also hold appointments in the Experiment Station and are able to incorporate active research into their teaching.

The dissemination of University research in agriculture and human environmental sciences is carried out by personnel in the Cooperative Extension Service, created by the Smith-Lever Act of 1914. Many Extension specialists also hold adjunct faculty status and bring their expertise to the teaching program.

It is this blending of teaching, research, and service functions that create a unique learning environment in the college. As students learn to relate basic areas of science to human needs, they study in laboratory-based classes and are taught in research facilities supported by the Division of Agriculture. Similarly, students are encouraged to intern with professionals in industry and governmental agencies, including the Cooperative Extension Service.

In recognition of the land-grant mission of the University and its commitment to serve the entire state, the Dale Bumpers College of Agricultural, Food and Life Sciences has worked cooperatively with numerous community colleges to organize the Arkansas Consortium for Teaching Agriculture (ACTA). ACTA is designed to facilitate the “seamless” transfer of students from community colleges to the Bumpers College. Coordinated advising, recruiting, and curricula development are working goals of the consortium. Students interested in transferring while enrolled at an ACTA partner school should contact the dean’s office.

FACILITIES AND RESOURCES

The Dale Bumpers College of Agricultural, Food and Life Sciences is composed of ten academic departments and the School of Human Environmental Sciences. The college offers both undergraduate and graduate level degrees.

The Agricultural, Food and Life Sciences Building houses the dean's office and the department of Animal Science and serves as the headquarters for the college academic functions. There are six other buildings on campus operated by the college including the Agriculture Building, Home Economics Building, Rosen Center, Plant Science Building, Agricultural Annex, and the Center of Excellence for Poultry Science. Additionally, the Food Science Building, Alzheimer Laboratory, Abernathy Agrit-Science Laboratory, Biological and Agricultural Engineering Laboratory, Pauline
Whitaker Animal Science Arena, and the Dorothy E. King Equine Science facilities are located at the Research and Extension Center north of the main campus. These serve as additional teaching laboratories or classroom facilities. Also, the Jean Tyson Child Development Study Center is managed by the college to provide instructional training for the child development program.

Several classrooms are equipped with “class capture” technology to allow students to view lectures online and to aid distance education courses. Students can receive academic assistance through the Academic Enhancement Program (AEP) coordinated by the dean’s office. Students can also seek assistance through the Enhanced Learning Center, a campus-wide resource.

COLLEGE SCHOLARSHIPS

In addition to the scholarships awarded by the University, there are a number of scholarships available to students in agriculture and human environmental sciences made possible by generous gifts from many firms and individuals. To be considered for a college scholarship, students must first be admitted to the University. Most scholarships require students to be enrolled full-time, at least 12 credit hours per semester. A college scholarship application, which serves as an application to all available scholarships offered by the college, must be submitted each year. For additional information, please see the AFLS Scholarship website at http://bumperscollege.uark.edu/39.htm. A listing of various outside scholarships is available for review in the dean’s office, E-108, Agricultural, Food and Life Sciences Building and on the college’s Web site. There are also miscellaneous outside scholarships for which applications are available in some departmental offices. For more information on scholarships, contact the dean’s office.

STUDENT ORGANIZATIONS

Agricultural Business Club is for students interested in agricultural business and economics.

Agricultural Communicators of Tomorrow (ACT) is designed for students with an interest in agricultural communications.

Agricultural Mechanization Club is a student organization for those with an interest in agricultural technology.

American Society of Agricultural and Biological Engineers, Student Branch, (ASABE) is an organization for students interested in agricultural engineering.

Apparel Studies Student Association (ASSA) is an organization open to all students interested in the fashion industry.

Biological Engineering Club is a student organization for those interested in improving people’s lives and helping assure a sustainable quality of life for tomorrow. The club creates solutions to problems by coupling living systems (human, plant, animal, environmental, food, and microbial) with the tools of engineering and biotechnology through both an agricultural and environmental perspective.

Collegiate 4-H/FFA is for any student who has been active in 4-H or FFA or has a current interest in service to these youth-oriented organizations. This club is especially designed for students interested in teaching agricultural education or working for the Extension Service.

Collegiate Farm Bureau was formed in 2002 with support from the Arkansas Farm Bureau Federation. Its goals are to motivate students to become involved in shaping agricultural policy for the state and the nation.

Crop, Soil, and Environmental Science Club is a student organization for those interested in crops and soils through both an agricultural and environmental perspective.

Ecological Engineering Club is a student organization for those interested in design of sustainable systems in concert and consistent with ecological principles that integrate human activities with the natural environment to the benefit of both, through agricultural and environmental perspectives.

Food Science Club is an organization for those students interested in food science.

GroGreen is student organization for students to learn about and practice sustainable and organic farm and garden practices.

Horticulture Club is a student organization for those interested in horticulture including floriculture, ornamentals, turf, small fruits and vegetables.

Hospitality and Restaurant Management Club is for students who are interested in the food and beverage, hotel operations and tourism aspects of the hospitality industry.

Isely-Baerg Entomology Club is open to those who wish to stimulate interest in the field of entomology, perform outreach programs for the public and to promote and encourage professional exchange of ideas in the field of entomology.

Minorities in Agriculture, Natural Resources Related Sciences (MANRRS): The purpose of this organization is to promote and implement initiatives which foster inclusion and advancement of members of ethnic/cultural groups under-represented in the agricultural and natural sciences and related fields in all phases of career preparation and participation.

National Block and Bridge Club is for students who are interested in any phase of animal science. Students with interests in horses, cattle, sheep, dogs, cats, or swine will find this club a good place to become involved.

Plant Pathology Graduate Student Association (PPGSA) is an organization open to graduate students interested in plant pathology or related fields.

Poultry Science Club is open to all students interested in any phase of the poultry industry or related fields.

Pre-Vet Science Club is for students interested in veterinary medicine and is especially designed for those students in the pre-veterinary medicine curriculum.

Student Dietetic Association (SDA) is an organization for students who are interested in the profession of dietetics. The goals are to promote growth in professional attitudes and to provide various programs of interest to the members.

Turf Management Club is a student organization open to all students interested in turfgrass management.

University of Arkansas chapter of the American Association of Family and Consumer Sciences (ArAAFCS) offers student membership to all human environmental sciences majors. Monthly meetings highlight various phases of human environmental sciences and provide social contact with other majors. In addition, members become involved in local service projects and may attend statewide workshops and leadership training sessions.

There are also numerous general organizations on the University campus, and students of the Dale Bumpers College of Agricultural, Food and Life Sciences participate in most of them. These include fraternities, sororities, honor and scholarship organizations, religious and music groups, sports organizations, and others.

Alpha Tau Alpha is a national honorary professional fraternity for those preparing to become teachers of agricultural education. Its mission is to develop a true professional spirit in the teaching of agriculture, to help train teachers of agriculture who shall be leaders in their communities, and to foster a fraternal spirit among students in teacher training in agricultural education.

Alpha Zeta is the professional honor fraternity for students of agriculture. To be invited to become a member, a student must rank in the upper two-fifths of the class and be recognized for leadership and character.

Eta Sigma Delta is the professional honor society for those students studying within the Hospitality and Restaurant Management concentration in the School of Human Environmental Sciences.

Gamma Sigma Delta is the honor fraternity for graduating seniors, graduate students, faculty, and alumni of the Dale Bumpers College of Agricultural, Food and Life Sciences. Seniors must rank in the upper 25 percent of their class to be eligible for membership, but not more than 15 percent of the class may be elected for membership. The highest-ranking sophomore and the highest-ranking senior are recognized annually by the society.

Phi Upsilon Omicron is the professional honor society for human environmental sciences students. To be eligible for invitation to membership, a student must rank in the upper 35 percent of the class and be recognized for character and leadership.

ACADEMIC ADVISING

Bumpers College advising mission is to enhance the educational experience and maximize opportunities for students. Therefore, we are committed to a strong, effective academic advising program. Advising plays a significant role in the total process of educating students for lifelong learning. The adviser assists students with the development and implementation of their educational plans.

Research demonstrates that the more contact students have with faculty, the more
likely they are to persist and complete their educational goals in a timely manner. Therefore, the college has adopted a faculty advisement model. The faculty adviser serves as a facilitator to assist students in maximizing their education potential. The advising relationship is a partnership between the student and the faculty adviser that is dependent on effective communication and regular contact.

Selection of a Major
A student who elects to major in some area of study in the college should plan the program with a faculty adviser. While undecided students are welcome, early selection of a major will permit better planning and proper sequencing of courses. The student and faculty adviser work closely to ensure that curriculum requirements are met in a timely fashion. A student uncertain about a major will be advised as an undeclared major through the dean's office.

DEGREES OFFERED
All entering students (including freshmen, international and transfer students) admitted to the University of Arkansas, Fayetteville, are eligible to pursue a degree program in the Dale Bumpers College of Agricultural, Food and Life Sciences. Degrees offered are as follows:

- The Bachelor of Science in Agricultural, Food and Life Sciences (B.S.A.)
- The Bachelor of Science in Human Environmental Sciences (B.S.H.E.S.)

MAJORS, CONCENTRATIONS AND MINORS

Agricultural, Food and Life Sciences

B.S.A. Degree

- Majors and Concentrations
  - Agricultural Business (AGBS)
  - Agricultural Business Management and Marketing (ABMM)
  - Agricultural Economics (AGEC)
  - Pre-Law (PRLW)
  - Agricultural Education, Communication and Technology (AECT)
  - Agricultural Communications (ACOM)
  - Agricultural Education (AGED)
  - Agricultural Systems Technology Management (ASTM)
  - Animal Science (ANSC)
  - Crop Management (CPMG)
  - Environmental, Soil, and Water Science (ESWS)
  - Food Science (FDSC)
  - Food Science (FDTC)
  - Food Technology (FDTN)
  - Food and Culinary Sciences (FDCU)
  - Horticulture, Landscape, and Turf Sciences (HLTS)
  - Poultry Science (POSC)

- Minors Offered
  - Agricultural Business (AGBS-M)
  - Agricultural Communications (ACOM-M)
  - Agricultural Education (AGED-M)
  - Agricultural Systems Technology Management (ASTM-M)
  - Animal Science (ANSC-M)
  - Crop Biotechnology (CPBT-M)
  - Crop Management (CPMG-M)
  - Entomology (ENTO-M)
  - Environmental, Soil, and Water Science (ESWS-M)
  - Equine Science (EQSC-M)
  - Food Science (FDSC-M)
  - Global Agricultural, Food and Life Sciences (AFLS-M)
  - Horticulture (HORT-M)
  - Journalism (JOUR-M)
  - Landscape Horticulture (LHRT-M)
  - Pest Management (PMGT-M)
  - Plant Pathology (PLPA-M)
  - Poultry Science (POSC-M)
  - Turf Management (TURF-M)
  - Wildlife Habitat (WLHA-M)

Certificates Offered
- Food Safety Manager Certificate of Proficiency (FMGR-CP)
- Hazard Analysis and Critical Control Point Coordinator Certificate of Proficiency (HCCP-CP)

In both certificates, students take a concentrated core of Web-based courses focused on the application of scientifically based food-safety systems through the application of HACCP systems. Applicants must have a B.S. degree or seven years of relevant experience in the food industry to be admitted. See page 96 for the list of courses.

School of Human Environmental Sciences

B.S.H.E.S. Degree

- Majors and Concentrations
  - Apparel Studies (APST)
  - Food, Human Nutrition and Hospitality (FHNH)
  - Dietetics (DIET)
  - General Foods and Nutrition (GFNU)
  - Hospitality and Restaurant Management (HRMN)
  - General Human Environmental Sciences (HESC)
  - Human Development and Family Sciences (HDFS)
  - Child Development (CDEV)
  - Birth through Kindergarten (BRKD)
  - Lifespan (LSPN)

- Minors Offered
  - General Foods and Nutrition (GFNU-M)
  - Human Development and Family Sciences (HDFS-M)

Minors in Other Colleges

- Minors in other Colleges: Students in the College of Agricultural, Food and Life Sciences may pursue an academic minor in the Sam M. Walton College of Business or in the J. William Fulbright College of Arts and Sciences. These minors usually consist of 15 to 20 hours of course work. For requirements regarding minors, check the catalog under the department offering the minor. Students must notify the dean’s office of their intention to pursue a minor.

Special (Non-Degree Seeking) Students

- While most students enrolled in the Dale Bumpers College of Agricultural, Food and Life Sciences work toward a degree, students who desire additional education of a specific nature but who do not wish to fulfill all requirements for a degree may enroll as special students. It is recommended that students declare a minor by the end of their sophomore year.

GRADUATE STUDIES

- The Graduate School of the University, in cooperation with the Dale Bumpers College of Agricultural, Food and Life Sciences, offers the Master of Science degree in each of its ten departments and in the School of Human Environmental Sciences. Six doctoral degrees are offered. More detailed information regarding individual programs may be obtained by contacting the administrative office of each department, or by consulting the Graduate School Catalog.

ACCREDITATIONS

- The Bachelor of Science in Human Environmental Sciences (B.S.H.E.S.) degree programs are accredited by the Council for Professional Development of the American Association of Family and Consumer Sciences. The degree program in dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics of
the Academy of Nutrition and Dietetics. The Nursery School and the Infant Develop-
ment Center in the School of Human Environmental Sciences are accredited by the
National Association for the Education of Young Children (NAEYC). The Bachelor
of Science in Agricultural, Food and Life Sciences (B.S.A.) in food science is accredited
by the Institute of Food Technologists. Teacher education programs in agriculture and
family and consumer sciences are coordinated with educational programs in the Col-
lege of Education and Health Professions and are accredited by the National Council
for Accreditation of Teacher Education (NCATE).

THE YOU OF A
The YOU of A
Dale Bumpers College of Agricultural, Food and Life Sciences

Quality courses that give a student an excellent background for the pursuit of a degree
ments at the University, including chemistry, English, and biological sciences, all offer
complete them in a two-year span or over three or four years. The supporting depart-
ments in fulfilling their pre-veterinary medicine requirements whether they desire to
earned in the first two years at an accredited college of veterinary medicine back to
Arkansas, provided they complete certain degree requirements at the
University prior to entering a school or college of veterinary medicine. These students
in Louisiana State University and at
Arkansas Act 881, passed in 2011, established a loan repayment program for
Arkansas residents who attend Mississippi State University College of Veterinary
The loan repayment program will assist Arkansas residents with the repay-
fed of federally funded student loans incurred while attending veterinary school at
Mississippi State University. Beginning in April 2012, participants in the program will
be required to practice in the state of Arkansas for up to five consecutive years with a
minimum of 30 percent of their practice devoted to food or mixed animal medicine
in rural areas of Arkansas. This may include corporate or private veterinary practice.

The pre-veterinary medicine program at the University of Arkansas is adminis-
ter in the departments of Animal Science and Poultry Science of the Dale Bumpers
College of Agricultural, Food, and Life Sciences. There are faculty in these departments
who help counsel and advise students regarding their pre-veterinary medicine pro-
There are also faculty veterinarians who provide some insight into the practice of
veterinary medicine and are knowledgeable about many of the considerations encoun-
tered in establishing a practice upon graduation. Some of these veterinarians have been
in private practice; others have been involved in full-time agricultural research since
graduation from veterinary medicine and graduate school. Because there is a wide
cross-section of experience among these faculty, students find their counsel valuable in
planning a future in veterinary medicine.

While it is possible to complete requirements for admission to some colleges of
veterinary medicine in two years, most students take three years or more to complete
the requirements, and most complete a B.S. degree before being admitted. Students
who carefully plan their work may complete a B.S. degree by transferring hours
earned in the first two years at an accredited college of veterinary medicine back to
the University of Arkansas, provided they complete certain degree requirements at the
University prior to entering a school or college of veterinary medicine. These students
must complete a minimum of 94 hours of a 124-hour program of prescribed courses.
This will require three years and one or two 6-week summer terms for most students.
Therefore, students should inform their advisers early in their program that they wish
to be in a pre-vet degree program.

The Bumpers College of Agricultural, Food and Life Sciences is ready to assist
students in fulfilling their pre-veterinary medicine requirements whether they desire to
complete them in a two-year span or over three or four years. The supporting depart-
ments at the University, including chemistry, English, and biological sciences, all offer
quality courses that give a student an excellent background for the pursuit of a degree
in veterinary medicine.

To earn the professional degree, a student must complete the pre-veterinary

HONORS PROGRAM
The Bumpers College Honors Program provides students with opportunities for
intellectual enrichment beyond the traditional undergraduate experience. This is
accomplished through special honors courses, completion of an undergraduate honors
thesis, and other significant activities. Students must maintain a GPA of 3.50 and
subscribe to the Statement of Ethical Standards to remain in the program.

Students in the AFLS Honors Program are required to complete 9 hours of
honors courses from any college. The AFLS Honors courses include:
AFLS 1011H Honors Freshman Orientation
AFLS 3131H Honors Management and Leadership
AFLS 3412H Honors Proposal Development
AFLS 3512H Rotations in Agric. Lab Research
AFLS 4431H Honors: Exploring Ethics
AFLS 401VH Honors Special Topics -- Topics include: Personal Excellence,
Professional Development, Global Issues in AFLS and Contemporary
Readings.

Honors students are also required to complete 6 hours of thesis credit as AFLS
400VH Honors Thesis.

The AFLS Honors Program Statement of Ethical Standards states:
"As a member of the AFLS Honors Program, I pledge to uphold the ethical
standards of honesty and trustworthiness in all academic and research/ creative
activities. I recognize that it is a privilege to be a member of the
University of Arkansas Honors College and will dedicate my efforts to
ensure that the highest levels of ethical standards are maintained."

To support their research or creative projects, participants in the Honors Program
are eligible to apply for undergraduate research grants from the Arkansas Student
Undergraduate Research Fellowships (SURF) program awarded by the state, the University
Honors College, and from the Bumpers College. The results of the student's original
research or creative project can be published in Discovery, the undergraduate research
journal of the Bumpers College or Inquiry: the University Journal of Undergraduate
Research and Creative Activity. Honors students can also apply to the Honors College
for Study Abroad and conference grants and to the Bumpers College Study Abroad
program. Students who have fulfilled the requirements of the Bumpers College Honors
Program will be recognized as graduating with Honors Program Distinction. The
COLLEGE ACADEMIC REQUIREMENTS

All students must satisfy the following University Graduation requirements

1. Complete a minimum of 124 semester hours.
2. Fulfill University Core Requirements of 35 hours. See page 41 for a list of courses that meet the requirements. Check requirements for each major as some majors require specific core courses as prerequisites to upper level courses.
3. Earn a grade-point average of 2.00 (“C” average) on all work attempted at the University of Arkansas.
4. Present no more than 68 semester hours of lower-division transfer course work (1000/2000 level) for degree credit.
5. Present no more than 25 percent in “D” grades earned at the University of Arkansas to meet degree requirements.
6. All students must meet the University enrollment requirement found on Page 40.

Specific Degree Requirements

1. To fulfill the residency requirements of the degree of Bachelor of Science in Agricultural, Food and Life Sciences, students must complete a minimum of 30 semester hours within Bumpers College. In addition, a minimum of 9 hours of broadening electives (Bumpers College courses taken outside the departmental code) must be completed.
2. To fulfill the residency requirements of the degree of Bachelor of Science in Human Environmental Sciences, students must complete a minimum of 30 hours within the School of Human Environmental Sciences at the University of Arkansas.
3. A minimum of 39 hours of courses at the 3000-level or above.
4. In addition to university requirements students must meet other defined degree requirements specific to each major and concentration. Bumpers College courses outside of the major may be included in degree requirements.
5. General electives will vary by major. Electives may be selected to meet the requirements for a minor; however, all elective credits are subject to approval of the academic adviser.

Rules Applying to Course Work Used for Degree Credit

1. No credit will be given for duplicate coursework.
2. A maximum of six hours of internship and six hours of special problems may be counted for degree credit.
3. A total of six semester hours of elective credits in University band, chorus, judging teams, drama, debate, physical education, etc., may be counted toward a degree.
4. Any course taken by correspondence, including Web-based courses, must be approved in advance in the dean’s office if the credits earned in the course are to be applied toward a degree. This rule applies regardless of the school from which the course is taken.
5. All transfer course work to be applied toward the degree must be an approved course listed in the transfer equivalency guide maintained by the Registrar’s office. For courses not listed in the guide, petitions can be submitted to the Dean’s office by the student’s academic adviser.
6. All study abroad courses must be approved in advance in the Dean’s office if the credits earned in the courses are to be applied toward a degree.
7. Former students of the college who are readmitted after an absence of one year may be expected to meet the curriculum requirements in effect at the time of their readmission. Students should consult their academic adviser for degree planning before registering for classes.
8. Students interested in earning an additional bachelor’s degree should refer to the University requirements on page 44.

Requirements to Graduate with Honors

Students who have demonstrated exceptional academic performance in baccalaureate degree while completing the Honors Program in the Bumpers College will be recognized at graduation by the honors designations of cum laude, magna cum laude, or summa cum laude. To earn such designation, students must meet the following criteria:

1. Must have completed at least one-half of his or her degree work at the University of Arkansas.
2. Must have at least a 3.5 GPA on University of Arkansas course work, computed at graduation.
3. Must successfully complete the Bumpers College Honors Program, which includes a minimum of 9 hours of honors course work, 6 hours of honors thesis, and a completed honors capstone research or creative project culminating in a written thesis documenting the project.
4. For cum laude, the student must achieve a cumulative U of A GPA of 3.5 to 3.74.
5. For magna cum laude, the student must achieve a cumulative U of A GPA of 3.75 to 3.89.
6. For summa cum laude, the student must achieve a cumulative U of A GPA of 3.9 to 4.00.

These criteria may be evaluated and changed periodically by the College of Agricultural, Food and Life Sciences.
Requirements to Graduate with Distinction
Students who have not completed the Bumpers College Honors Program, but have demonstrated excellent academic performance in baccalaureate degree programs in the Bumpers College will be recognized at graduation by the designation of “with distinction,” “with high distinction,” and “with highest distinction.” To earn this designation, students must meet the following criteria:
1. Must have completed at least one-half of his or her degree work at the University of Arkansas.
2. Must have at least a 3.5 GPA on University of Arkansas course work, computed at graduation.
3. For “with distinction,” the student must achieve a cumulative U of A GPA of 3.5 to 3.74.
4. For “with high distinction,” the student must achieve a cumulative U of A GPA of 3.75 to 3.89.
5. For “with highest distinction,” the student must achieve a cumulative U of A GPA of 3.9 to 4.00.
These criteria may be evaluated and changed periodically by the College of Agricultural, Food and Life Sciences.

Grading System
The Dale Bumpers College of Agricultural, Food and Life Sciences utilizes a plus/minus grading system that assigns numerical values to 12 different grades. These values are used for courses when grade-point averages are calculated.
The 12-step grading system with assigned values is as follows:

A+...........4.33  A-...........3.67
A.............4.00  C+...........2.00
A-...........3.33  C.............2.33
B+...........3.67  C-...........1.67
B...............3.00  D+...........1.33
B-...........2.67  D.............1.00
C+...........2.33  D-...........0.67
C.............2.00  F .............0.00

DEPARTMENTAL MAJORS

AGRICULTURAL AND EXTENSION EDUCATION (AEED)

George W. Wardlow
Head of the Department
205 Agriculture Building
479-575-2035
http://aeed.uark.edu/

FACULTY
• Professors Graham, Johnson, Wardlow
• Associate Professor Miller
• Assistant Professors Edgar (D.), Edgar (L.)
• Instructor Cox
• Adjunct Associate Professor Poling, Ballard

Agricultural Education, Communication, and Technology (AECT)
The department of agricultural and extension education offers a degree program in agricultural education, communication and technology. Students with this major are in constant demand due to the rapidly changing educational needs of the agricultural and natural resources industries. Graduates with this degree have a broad knowledge of agricultural disciplines. They are prepared as agricultural technology transfer specialists to enter a variety of careers in formal and non-formal teaching roles in either the public or private sector as agricultural educators, Extension agents, industry-based trainers, information specialists, or technology-management specialists. Students in agricultural education, communication and technology may choose one of three areas of concentration listed below, or, with adviser’s approval, select courses from more than one concentration area.

Agricultural Education Concentration (AGED)
This area of concentration is designed for students who wish to receive initial teacher licensure to teach agricultural science in public schools.

Agricultural Systems Technology Management Concentration (ASTM)
Students planning a professional career related to technical operations and management in agricultural industry should enroll in this concentration. Graduates assume positions of leadership and responsibility in such areas as agricultural services and sales, agricultural management, agricultural production systems, product service, product testing, and service management. The program focuses on preparing students as problem solvers in the application, management and/or marketing of agricultural technology.

Agricultural Communications Concentration (ACOM)
This concentration is designed to produce graduates with both technical knowledge about the food and fiber industry and the communication skills needed to convey in an effective manner the story of agriculture to consumers, policy makers, and the public at large. Interpersonal and group communication, public relations, graphic art, video and television production, electronic communication, distance learning, video conferencing, and writing for the media are emphasized in this program.

Requirements for a Major in Agricultural Education, Communication and Technology (AECT)
State minimum core and discipline specific general education requirements:
(Course work that meets state minimum core requirements is in **bold**.)

Communications (6-12 hours)
- Choose from English Core courses (6 hours)
- COMM 1313 Public Speaking
- AGED 3142/3141L Agricultural Communications and lab
U.S. History or Government (3 hours)
- Choose from U.S. History or Government Core courses
Mathematics (3 hours)
- Choose from MATH Core courses
Sciences (15 hours)
- Choose from BIOL 1543/1541L Principles of Biology with lab or BIOL 2031/2011L General Microbiology and lab or PHYS 1044 Physics for Architects I with lab component or higher level
- CHEM 1073/1071L Fundamentals of Chemistry and lab
- Science Elective (3 hours) for AGED Concentration
- Science or Math Elective (3 hours) for ASTM and ACOM Concentrations

Agricultural Education Concentration (AGED)

- AGED 3142/3141L Agricultural Communications and lab
- AGED 1001 Orientation to Agri-Extension Education
- AGED 2003 Issues in Agriculture
- AGED 2043 Issues in Agriculture
- AGED 3003 Issues in Agriculture
- AGED 4003 Issues in Agriculture
- AGED 4041L Issues in Agriculture

Agricultural Systems Technology Management Concentration (ASTM)

- AGED 3142/3141L Agricultural Communications and lab
- AGED 1001 Orientation to Agri-Extension Education
- AGED 4003 Issues in Agriculture

Agricultural Communications Concentration (ACOM)

- COMM 1313 Public Speaking
- AGED 3142/3141L Agricultural Communications and lab
- AGED 1001 Orientation to Agri-Extension Education
- AGED 4003 Issues in Agriculture

Social Sciences (9 hours)
- Choose from **Social Science Core** courses (3 hours)
- AGEC 1103 Principles of Microeconomics or AGEC 2103 Principles of Agri Macroeconomics
- PSYC 2003 General Psychology

AECT Requirements (25 hours)
- AFLS 1011 Freshman Orientation
- AGED 1001 Orientation to Agri-Extension Education
- AGED 4003 Issues in Agriculture
__AGME 1613/161L Fundamentals of Agricultural Systems Technology and lab
__AGME 2903 Applied Microcomputers
__ANSC 1032 Introduction to Animal Science
__ANSC 1051 Introduction to Livestock Industry
__CSES 1203 Introduction to Plant Sciences
__CSES 2013 Pest Management
__CSES 2203 Soil Science
__CSES 2201L Soil Science lab or CSES 355V(1) Soil Profile Description

**Additional Requirements for AGED Concentration**

For Teacher Certification (44-45 hours):

Mechanical Technology Courses (Choose 8 hours)

__AGME 2123 Metals and Welding with lab component
__AGME 3042 Ag Construction Technology
__AGME 3102/3101L Small Power Units/Turf Equipment and lab
__AGME 3153 Surveying Agri and Forestry
__AGME 3173 Electricity in Agriculture with lab component
__AGME 4203 Mechanized Systems Management with lab component
__AGME 4973 Irrigation with lab component

Education Courses (24 hours)

__AGED 1031 Early Field Experience
__AGED 1123 Foundations of Agricultural Education
__AGED 3133 Methods in Agri Education with lab component
__AGED 4233 Program Development
__AGED 4632 Teaching Diverse Populations
__AGED 4843 Methods in Ag Labs
__CIED 3023 Survey of Exceptionalities or
__CIED 4023 Teaching in Inclusive Secondary Settings
__CIED 3033 Classroom Learning Theory

__CHLP 3633 First Responder-First Aid or equivalent (If student has completed Red Cross Life Saver certification, choose 3 hours of upper division general electives.)

Other requirements for AGED Concentration (12-13 hours)

__AGED 475V Internship (6 hours) (Criminal background check is required prior to student internship)
__HORT Elective (3 hours)
__Science Elective (3-4 hours) – CHEM 2613/2611L required for Science Teacher Licensure

Electives (6-13 hours)

**124 Total Hours**

**Additional Requirements for ACOM Concentration** (39 hours)

__AGED 2143 Introduction to Agricultural Communications
__COMM 2303 Public Speaking
__JOUR 1023 Media and Society
__JOUR 1033 Fundamentals of Journalism with lab component
__AGED 3153 Leadership Development in Ag
__AGED 3243 Ag Reporting and Feature Writing
__AGED 3943 Professional Development in Agricultural Communications
__AGED 4143 Electronic Communications in Agriculture
__AGED 4243 Graphic Design in AFLS
__AGED 4343 Communication Campaigns in Agriculture
__EXED 475V Internship in Extension (3 hours)

Choose 6 hours from:

__AGED 4443 Principles of Technological Change
__AGED 4543 Ag Publications
__COMM 3303 Small-Group Communication
__COMM 3703 Organizational Communication
__JOUR 2013 News Reporting I

__JOUR 2032/2031L Broadcast News Reporting I and lab
__JOUR 2332/2331L Photo Journalism I and lab
__JOUR 3023 News Reporting II with lab component
__JOUR 3072/3071L Broadcast News Reporting II and lab
__JOUR 3743 Public Relations Principles

Electives (12-18 hours)

**124 Total Hours**

**Additional Requirements for ASTM Concentration** (33 hours)

__AGEC 2303 Intro to Agribusiness
__AGEC 3303 Food and Agricultural Marketing
__AGEC 3403 Farm Business Management
__AGED 3153 Leadership Development in Agriculture
__AGME 3102/3101L Small Power Unit/Turf Equipment and lab
__AGME 3173 Electricity in Agriculture with lab component
__EXED 475V Internship in Extension (3 hours)
__Science or Math Elective (3-4 hours)

Choose 8-9 hours from:

__AGME 2123 Metals and Welding with lab component
__AGME 3153 Surveying Agriculture and Forestry
__AGME 4203 Mechanized Systems Management with lab component
__AGME 4973 Irrigation with lab component
__ENS 3603 GIS for Environmental Science
__GEOG 3543 Geographic Info Science
__GEOG 4523 Computer Mapping
__GEOG 4593 Intro to GPS

Electives (18-24 hours)

**124 Total Hours**

**Agricultural Education, Communication and Technology B.S.A. Nine-Semester Degree Program**

Students wishing to follow the degree plan in Agricultural Education, Communication and Technology should see page 41 in the Academic Regulations chapter for university requirements of the program. The Agricultural Education, Communication and Technology major has three concentrations: Agricultural Education, Agricultural Systems Technology Management, and Agricultural Communications.

**Fall Semester Year 1**

1  AFIS 1011 Freshman Orientation
1  AGED 1001 Orientation to Agricultural/Extension Education
3  AGED 1123 Foundation of Agricultural Education (AGED)
4  AGEC 1613/161L Fundamentals of Agricultural Systems Technology and lab
3  AGME 2903 Applications of Microcomputers (ACOM & ASTM concentrations)
2  ANSC 1032 Introductory Animal Sciences
1  ANSC 1051 Introduction to the Livestock Industry
3  University Core ENGL 1013 Composition I unless exempt

**Spring Semester Year 1**

4  BIOL 1543/1541L Principles of Biology and lab
3  CSES 1203 Introduction to Plant Sciences
3  University Core ENGL 1023 Composition II unless exempt
3  University Core MATH 1203 College Algebra or higher math
3  PSYC 2003 General Psychology

**Fall Semester Year 2**

3  AGEC 1103 Principles of Ag Microeconomics or AGEC 2103 Principles of Ag Macroeconomics
3  COMM 1313 Public Speaking
4  CHEM 1073/1071L Fundamentals of Chemistry and lab
3  General Elective (ACOM and ASTM concentrations)
3-6  Concentration Related Elective (AGED 6 hours and ASTM 3 hours concentrations)
3  AGME 3943 Professional Development and Agricultural Communications (ACOM concentration)

**16 Semester hours**
Minor in Agricultural Communications (ACOM-M)  
The Agricultural Communications Minor will consist of 18 hours to include the following:  
- AGED 2143 Introduction to Agricultural Communications (ACOM concentration)  
- AGED 3142/3141L Agricultural Communications and lab  
- JOUR 1033 Fundamentals of Journalism (with lab component)  
Choose 9 hours from:  
- AGED 3243 Ag Reporting and Feature Writing  
- AGED 3943 Professional Development in Ag Communications  
- AGED 4143 Electronic Communications in Agriculture  
- AGED 4243 Graphic Design in AFLS  
- AGED 4343 Communication Campaigns in Agriculture  
A student planning to minor in Agricultural Education must notify the program adviser.

Minor in Agricultural Education (AGED-M)  
The Agricultural Education Minor will consist of 22 hours to include the following:  
- AGED 1031 Introduction to Early Field Experience  
- AGED 1123 Foundations of Agricultural Education  
- AGED 2903 Applications of Microcomputers  
- CIED 3023 Survey of Exceptionality or CIED 4023 Teaching in Inclusive Secondary Settings  
- CIED 3033 Classroom Learning Theory  
- AGED 3133 Methods in Agricultural Education with lab component  
- AGED 4233 Program Development  
- AGED 4843 Methods in Agricultural Laboratories  
A student planning to minor in Agricultural Education must notify the program adviser.

Minor in Agricultural Systems Technology Management (ASTM-M)  
The Agricultural Systems Technology Management Minor will consist of 18 hours to include the following:  
- AGME 1613 Fundamentals of Agricultural Systems Technology  
- AGME 2903 Application of Microcomputers or equivalent  
Choose 12 hours from:  
- AMGE 1611 Fundamentals of Agricultural Systems Technology Lab  
- AMGE 2123 Metals and Welding with lab component  
- AMGE 3153 Surveying in Agriculture and Forestry  
- AMGE 3102/3101L Small Power Units/Turf Equipment and lab  
- AMGE 3173 Electricity in Agriculture with lab component  
- AMGE 4203 Mechanized Systems Management with lab component  
- AMGE 4973 Irrigation with lab component  
- ENSC 3603 GIS for Environmental Science  
A student planning to minor in Agricultural Systems Technology Management must notify the program adviser for consultation and more detailed information.

Minor in Journalism (JOUR-M)  
The Journalism Minor allows for a combination of training in journalism with a specialization in agriculture or human environmental sciences. Its purpose is to prepare the student for employment with firms and institutions that produce agricultural or human environmental sciences publications or employ public relations personnel. Students must be majoring within the Bumpers College to pursue this minor.  
Bumpers College students interested in a journalism minor may choose from one of three areas:  
- Print Journalism (18 semester hours)  
  - JOUR 1023 Media and Society  
  - JOUR 1033 Fundamentals of Journalism with lab component  
  - JOUR 2013 News Reporting I  
  - JOUR 3013 Editing  
  - JOUR 3123 Feature Writing  
  - JOUR 3633 Media Law  
- Broadcast Journalism (18 semester hours)  
  - JOUR 1023 Media and Society  
  - JOUR 1033 Fundamentals of Journalism with lab component  
  - JOUR 2032/2031L Broadcast News Reporting I and lab  
  - JOUR 3072/3071L Broadcast News Reporting II and lab  
  - JOUR 3633 Media Law  
  - JOUR 4863 Television News Reporting I with lab component  
- Print and Broadcast Journalism (18 semester hours)  
  - JOUR 1023 Media and Society  
  - JOUR 1033 Fundamentals of Journalism with lab component  
  - JOUR 2013 News Reporting I  
  - JOUR 2032/2031L Broadcast News Reporting I and lab  
  - JOUR 3072/3071L Broadcast News Reporting II and lab  
  - JOUR 3633 Media Law  
A student interested in a Journalism minor must notify his or her major adviser for detailed information. The minor is coordinated by the department of Agricultural and Extension Education in consultation with the department of Journalism. Before declaring the Journalism minor, the student must meet with and must be advised by a faculty member in Agricultural and Extension Education department.
AGRICULTURAL ECONOMICS AND AGribusiness (AEAB)

Steve A. Halbrook
Head of the Department
217 Agriculture Building
479-575-2256
http://agribus.uark.edu/

FACULTY
• Distinguished Professor Wailes
• Professors Ahrendsien, Cochran, Dixon, Goodwin, Halbrook, McKenzie, Nayga, Popp (J.), Popp (M.)
• Adjunct Professors Bryant, Miller
• Associate Professors Rainey, Thomisen
• Assistant Professors Flanders, Griffin, Nalley
• Research Assistant Professor Pittman
• Instructor Ragland

The agricultural business degree program provides education suited to career opportunities in farm management, agricultural business management, and agricultural marketing in both the domestic and international areas.

Managers of farms and agricultural businesses are continually required to make organizational and operational decisions. The basic skills and knowledge needed for making sound decisions are provided by the agricultural business curriculum. Students may elect to specialize in areas compatible with their personal objectives, depending upon the extent of accounting and business orientation desired.

Students educated in agricultural business are in demand for positions in agricultural industries, farm operation, marketing agencies, agricultural service organizations, state and federal agencies, and numerous other positions. For those who go on to graduate school, teaching and research positions are available in land grant colleges as well as with other institutions. Three concentrations are available to meet career objectives:

A. Agricultural Business Management and Marketing (ABMM)
B. Pre-Law, for students preparing to attend law school (PRLW)
C. Agricultural Economics, which emphasizes quantitative and analytical skills to prepare students for graduate school (AGEC).

Requirements for a Major in Agricultural Business (AGBS)
State minimum core and discipline specific general education requirements:

(Course work that meets state minimum core requirements is in bold.)

Communications (6-12 hours)
• Choose from English Core courses (6 hours)
  __ Choose 3 hours from AGED 2142/2141L, ENGL 2013, ENGL 3053,
  __ COMM 2303, COMM 2323, COMM 2373, COMM 3303, COMM 3383, or JOUR 1033

U.S. History or Government (3 hours)
• Choose from U.S. History or Government Core courses

Mathematics and Statistics (9-13 hours)
• Choose from MATH Core courses
  __ MATH 2053 Finite Mathematics

ABMM, PRLW Concentrations (5 hours):
• Choose 3 hours from AGEC 2403 Quantitative Tools for Agribusiness or
  __ WCOB 1033 Data Analysis and Interpretation

AGEC Concentration (6-7 hours)
• Choose 3 hours from MATH 2043 Survey of Calculus
  __ WCOB 1033 Data Analysis and Interpretation or
  __ STAT 4003/4001L Statistical Methods and Lab

Sciences (8 hours)
• Choose from Science Core courses

Fine Arts and Humanities (6 hours)
• Choose from Fine Arts/Humanities Core courses

Social Sciences (9 hours)
• PSYC 2003 General Psychology or
  __ SOCI 2003 General Sociology or
  __ RSOC 2603 Rural Sociology
• AGEC 2103 Principles of Agricultural Microeconomics or
  __ ECON 2023 Principles of Microeconomics
• AGEC 2103 Principles of Agricultural Macroeconomics or
  __ ECON 2013 Principles of Macroeconomics

AEAB Requirements (18 hours)
• AGEC 2303 Introduction to Agribusiness
• AGEC 3303 Food and Agricultural Marketing
• AGEC 3403 Farm Business Management
• AGEC 3503 Agricultural Law
• AGEC 4143 Agricultural Finance
• AGEC 4613 Domestic and International Agricultural Policy

Bumpers College Broadening Electives (9 hours)
Choose 9 hours outside of AGEC but within the Bumpers College.

General Electives (23-29 hours)

Additional Requirements for Agribusiness Management and Marketing Concentration (27 hours):

Choose 3 hours from:
• AGEC 2142/2141L Agribusiness Financial Records or
  __ WCOB 1023 Business Foundations

And take:
• AGEC 3373 Futures and Options Markets
• AGEC 3313 Agribusiness Sales
• AGEC 3413 Principles of Environmental Economics

Choose 6 hours from:
• AGEC 4113 Ag Prices and Forecasting
• AGEC 4163 Agricultural and Rural Development
• AGEC 4313 Agribusiness Management
• AGEC 4323 Agribusiness Entrepreneurship
• AGEC 4373 Basis Trading: Applied Price Risk Management

Choose 9 hours from:
• MATH, STAT, AGEc or courses in WCOB or the Bumpers College.

124 Total Hours

Additional Requirements for Pre-Law Concentration (27 hours):

Choose 3 hours from:
• AGEC 2142/2141L Agribusiness Financial Records or
  __ WCOB 1023 Business Foundations

And take:
• AGEC 4313 Agricultural Business Management
• AGEC 4323 Agribusiness Entrepreneurship

Choose 15 hours from at least two areas:

Area 1
• BLAW 3033 Commercial Law
• WCOB 1012 Legal Environment of Business

Area 2
• COMM 2303 Advanced Public Speaking
• COMM 2373 Intro to Debate
• COMM 3303 Small Group Communication
• COMM 3353 Argumentation: Reason in Communication
• COMM 3383 Persuasion
• COMM 3443 Intro to Rhetorical Theory
• COMM 4113 Legal Communication

Area 3
• PHIL 2003 Intro to Philosophy
• PHIL 2103 Intro to Ethics
• PHIL 2203 Logic
• PHIL 3103 Ethics and the Professions
• PHIL 4143 Philosophy of Law
The YOU of A Dale Bumpers College of Agricultural, Food and Life Sciences

Program satisfy this requirement.
work necessary for the baccalaureate degree. The requirements embodied in the 3/3
be admitted to Law School until they have completed at least three-fourths of the
business. It is a requirement of the Law School's accrediting standards that no student
in their fourth year provided that the following requirements have been met:

- completed all University, college, and department core requirements for the
pre-law concentration;
- completed 12 hours in the specialization list for pre-law;
- attained a cumulative grade-point average in all college or University course
work of at least 3.00 without grade renewal;
- attained a LSAT score of at least 159.

A student who has satisfied these requirements may substitute law school course
work for the remaining total hours required for the bachelor's degree in agricultural
business. It is a requirement of the Law School's accrediting standards that no student
be admitted to Law School until they have completed at least three-fourths of the
work necessary for the baccalaureate degree. The requirements embodied in the 3/3
program satisfy this requirement.

Additional Requirements for Agricultural Economics Concentration (24
hours):

- WCOB 1023 Business Foundations
- WCOB 2033 Acquiring & Managing Human Capital
- ECON 3033 Microeconomic Theory
- ECON 3133 Macroeconomic Theory
- AGEC 3373 Futures and Options Markets

Choose 3 hours from:

- AGEC 4313 Agricultural Business Management
- AGEC 4323 Agribusiness Entrepreneurship

Choose 6 hours from MATH or STAT or upper division electives from AGEC
or WCOB.

124 Total Hours

The approved list of courses, check sheet, and degree program for all concentra-
tions is available in the Agricultural Economics and Agribusiness departmental office.

Agricultural Business B.S.A. with Management and Marketing Concentration
Eight-Semester Degree Program

Students wishing to follow the degree plan in Agricultural Economics and
Agribusiness should page 41 in the Academic Regulations chapter for university
requirements of the program. The Agricultural Economics and Agribusiness major has
three concentrations: Agricultural Business Management and Marketing, Pre-Law, and
Agricultural Economics.

Fall Semester Year 1
3 University Core ENGL 1013 Composition I unless exempt
3 University Core MATH 1203 College Algebra
3 History University Core Elective
3 AGEC 1103 Principles of Ag Microeconomics
3 AGME 2903 or Bumpers College Broadening Elective
0 WCOB 1120 Computer Competency Requirement (if not AGME 2903 Applica-
tion of Microcomputers)
15 Semester hours

Spring Semester Year 1
3 University Core ENGL 1023 Composition II unless exempt

Minor in Agricultural Business (AGBS-M)
The Agricultural Business Minor will consist of 18 semester hours to include:

- AGEC 1103 Principles of Agricultural Microeconomics
- AGEC 2303 Introduction to Agribusiness

Choose 6 hours from:

- AGEC 3303 Food and Agricultural Marketing
- AGEC 3373 Futures and Options Markets
- AGEC 3403 Farm Business Management
- AGEC 3413 Principles of Environmental Economics
- AGEC 4313 Agricultural Business Management and
- AGEC 2103 Principles of Agricultural Macroeconomics

Choose 6 hours from:

- AGEC 2412/2411L Agribusiness Financial Records and lab
- AGEC 2403 Quantitative Tools for Agribusiness
- AGEC 3303 Food and Agricultural Marketing
- AGEC 3313 Agribusiness Sales
- AGEC 3373 Futures and Options Markets
- AGEC 3403 Farm Business Management

124 Total Hours

The approved list of courses, check sheet, and degree program for all concentra-
tions is available in the Agricultural Economics and Agribusiness departmental office.

Agricultural Business B.S.A. with Management and Marketing Concentration
Eight-Semester Degree Program

Students wishing to follow the degree plan in Agricultural Economics and
Agribusiness should page 41 in the Academic Regulations chapter for university
requirements of the program. The Agricultural Economics and Agribusiness major has
three concentrations: Agricultural Business Management and Marketing, Pre-Law, and
Agricultural Economics.

Fall Semester Year 1
3 University Core ENGL 1013 Composition I unless exempt
3 University Core MATH 1203 College Algebra
3 History University Core Elective
3 AGEC 1103 Principles of Ag Microeconomics
3 AGME 2903 or Bumpers College Broadening Elective
0 WCOB 1120 Computer Competency Requirement (if not AGME 2903 Applica-
tion of Microcomputers)
15 Semester hours

Spring Semester Year 1
3 University Core ENGL 1023 Composition II unless exempt

Minor in Agricultural Business (AGBS-M)
The Agricultural Business Minor will consist of 18 semester hours to include:

- AGEC 1103 Principles of Agricultural Microeconomics
- AGEC 2303 Introduction to Agribusiness

Choose 6 hours from:

- AGEC 3303 Food and Agricultural Marketing
- AGEC 3373 Futures and Options Markets
- AGEC 3403 Farm Business Management
- AGEC 3413 Principles of Environmental Economics
- AGEC 4313 Agricultural Business Management and
- AGEC 2103 Principles of Agricultural Macroeconomics

Choose 6 hours from:

- AGEC 2412/2411L Agribusiness Financial Records and lab
- AGEC 2403 Quantitative Tools for Agribusiness
- AGEC 3303 Food and Agricultural Marketing
- AGEC 3313 Agribusiness Sales
- AGEC 3373 Futures and Options Markets
- AGEC 3403 Farm Business Management

124 Total Hours

The approved list of courses, check sheet, and degree program for all concentra-
tions is available in the Agricultural Economics and Agribusiness departmental office.

Agricultural Business B.S.A. with Management and Marketing Concentration
Eight-Semester Degree Program

Students wishing to follow the degree plan in Agricultural Economics and
Agribusiness should page 41 in the Academic Regulations chapter for university
requirements of the program. The Agricultural Economics and Agribusiness major has
three concentrations: Agricultural Business Management and Marketing, Pre-Law, and
Agricultural Economics.

Fall Semester Year 1
3 University Core ENGL 1013 Composition I unless exempt
3 University Core MATH 1203 College Algebra
3 History University Core Elective
3 AGEC 1103 Principles of Ag Microeconomics
3 AGME 2903 or Bumpers College Broadening Elective
0 WCOB 1120 Computer Competency Requirement (if not AGME 2903 Applica-
tion of Microcomputers)
15 Semester hours

Spring Semester Year 1
3 University Core ENGL 1023 Composition II unless exempt

Minor in Agricultural Business (AGBS-M)
The Agricultural Business Minor will consist of 18 semester hours to include:

- AGEC 1103 Principles of Agricultural Microeconomics
- AGEC 2303 Introduction to Agribusiness

Choose 6 hours from:

- AGEC 3303 Food and Agricultural Marketing
- AGEC 3373 Futures and Options Markets
- AGEC 3403 Farm Business Management
- AGEC 3413 Principles of Environmental Economics
- AGEC 4313 Agricultural Business Management and
- AGEC 2103 Principles of Agricultural Macroeconomics

Choose 6 hours from:

- AGEC 2412/2411L Agribusiness Financial Records and lab
- AGEC 2403 Quantitative Tools for Agribusiness
- AGEC 3303 Food and Agricultural Marketing
- AGEC 3313 Agribusiness Sales
- AGEC 3373 Futures and Options Markets
- AGEC 3403 Farm Business Management

124 Total Hours

The approved list of courses, check sheet, and degree program for all concentra-
tions is available in the Agricultural Economics and Agribusiness departmental office.

Agricultural Business B.S.A. with Management and Marketing Concentration
Eight-Semester Degree Program

Students wishing to follow the degree plan in Agricultural Economics and
Agribusiness should page 41 in the Academic Regulations chapter for university
requirements of the program. The Agricultural Economics and Agribusiness major has
three concentrations: Agricultural Business Management and Marketing, Pre-Law, and
Agricultural Economics.

Fall Semester Year 1
3 University Core ENGL 1013 Composition I unless exempt
3 University Core MATH 1203 College Algebra
3 History University Core Elective
3 AGEC 1103 Principles of Ag Microeconomics
3 AGME 2903 or Bumpers College Broadening Elective
0 WCOB 1120 Computer Competency Requirement (if not AGME 2903 Applica-
tion of Microcomputers)
15 Semester hours

Spring Semester Year 1
3 University Core ENGL 1023 Composition II unless exempt

Minor in Agricultural Business (AGBS-M)
The Agricultural Business Minor will consist of 18 semester hours to include:

- AGEC 1103 Principles of Agricultural Microeconomics
- AGEC 2303 Introduction to Agribusiness

Choose 6 hours from:

- AGEC 3303 Food and Agricultural Marketing
- AGEC 3373 Futures and Options Markets
- AGEC 3403 Farm Business Management
- AGEC 3413 Principles of Environmental Economics
- AGEC 4313 Agricultural Business Management and
- AGEC 2103 Principles of Agricultural Macroeconomics

Choose 6 hours from:

- AGEC 2412/2411L Agribusiness Financial Records and lab
- AGEC 2403 Quantitative Tools for Agribusiness
- AGEC 3303 Food and Agricultural Marketing
- AGEC 3313 Agribusiness Sales
- AGEC 3373 Futures and Options Markets
- AGEC 3403 Farm Business Management

124 Total Hours

The approved list of courses, check sheet, and degree program for all concentra-
tions is available in the Agricultural Economics and Agribusiness departmental office.
Global Studies director.
A student interested in a Global Agricultural, Food and Life Sciences minor must notify his or her major adviser for detailed information.

See Page 310 for Agricultural Economics and Agribusiness (AGEC) courses.

**ANIMAL SCIENCE (ANSC)**

Michael Looper  
Head of the Department  
78114 Agricultural, Food, and Life Sciences Building  
479-575-4351  
http://animalscience.uark.edu/

**FACULTY**

- University Professor Yazwinski
- Professors Apple, Brown (A.H.), Coffey, Jennings, Kegley, Looper, Maxwell, Pohlman, Roeder, Rorie, Rosenkrans, Troxel
- Adjunct Professors Brown (M.A.), Baird, Burke, Chewning, Cobleintz, Gunter, Pflazgraf, Nugent
- Associate Professors Beck, Gadberry, Jack, Jones, Kreider, Powell
- Adjunct Associate Professor Breeding
- Assistant Professors Phillip, Russell
- Adjunct Assistant Professors Caldwell, Reuter, Shanks
- Instructor Kutz

The animal science major is designed to provide the scientific and technical education to prepare students for positions of leadership and responsibility. Students gain valuable experience pertaining to the production of beef and dairy cattle, swine, horses, sheep, and companion animals. In addition, extensive study is offered in the specialized areas of animal health, breeding and genetics, meat science, nutrition, and physiology.

Students majoring in animal science are prepared for a variety of careers. Pre-veterinary, pre-medical, and pre-professional course requirements may be fulfilled while meeting degree requirements. Specific career opportunities include positions and services related to the production, merchandising, processing and distribution of meat, milk, and related products. Additional opportunities include field persons, farm and herd managers, and other agribusiness-related positions. With additional academic training, animal science majors may become extension livestock specialists, nutritionists, geneticists, and physiologists.

Students should consult an animal science adviser for specific course selections in the elective areas. With appropriate advising, students have an opportunity to complete at least one minor within the 124-hour degree program.

**Requirements for a Major in Animal Science (ANSC)**

State minimum core and discipline specific general education requirements: (Course work that meets state minimum core requirements is in **bold**.)

- Communications (6-12 hours)  
  - Choose from **English Core** courses (6 hours)
  - **COMM** 1313 Public Speaking
  - **Communication Intensive Elective** (See adviser for approved list.)
  - History or Government (3 hours)  
  - Choose from **U.S. History or Government Core** courses

- Mathematics (3 hours)  
  - Choose from **MATH Core** courses

- Sciences (16 hours)  
  - **BIOI** 1543/1541L Principles of Biology and lab or **BIOI** 2013/2011L General Microbiology and lab
  - **CHEM** 1073/1071L Fundamentals of Chemistry and lab or **CHEM** 1123/1121L University Chemistry II and lab
  - **CHEM** 2613/2611L Organic Physiological Chemistry and lab or **CHEM** 1073/1071L Fundamentals of Chemistry and lab or **CHEM** 1123/1121L University Chemistry II and lab

Minors in Global Agricultural, Food and Life Sciences (AFLS-M)

The Bumpers College offers a minor in global agricultural, food and life sciences to provide students throughout the college opportunities to complement their major field of study with an international component. It is designed to provide learning skills and international experiences leading to greater understanding of global issues in agriculture, human and environmental sciences and the ability to participate effectively in diverse cultures.

This minor will consist of 18 semester hours to include:

- **AFLS** 2003 Introduction to Global Agricultural, Food and Life Sciences  
- **AFLS** 300V Study/Internship Abroad (3 to 6 hours)

Choose at least 3 hours from:

- **AFLS** 3313H Honors Global Issues in AFLS (and study tour)
- **AGEC** 4163 Agricultural and Rural Development
- **AGEC** 4613 Domestic and International Agricultural Policy
- **HESC** 4653 Global Travel and Tourism Management;

Choose 6-9 hours from:

- **AFLS** 3313H Honors Global Issues in AFLS (and Study Tour)
- **AGEC** 4163 Agricultural and Rural Development
- **AGEC** 4613 Domestic and International Agricultural Policy

The animal science major is designed to provide the scientific and technical education to prepare students for positions of leadership and responsibility. Students gain valuable experience pertaining to the production of beef and dairy cattle, swine, horses, sheep, and companion animals. In addition, extensive study is offered in the specialized areas of animal health, breeding and genetics, meat science, nutrition, and physiology.

Students majoring in animal science are prepared for a variety of careers. Pre-veterinary, pre-medical, and pre-professional course requirements may be fulfilled while meeting degree requirements. Specific career opportunities include positions and services related to the production, merchandising, processing and distribution of meat, milk, and related products. Additional opportunities include field persons, farm and herd managers, and other agribusiness-related positions. With additional academic training, animal science majors may become extension livestock specialists, nutritionists, geneticists, and physiologists.

Students should consult an animal science adviser for specific course selections in the elective areas. With appropriate advising, students have an opportunity to complete at least one minor within the 124-hour degree program.

**Requirements for a Major in Animal Science (ANSC)**

State minimum core and discipline specific general education requirements: (Course work that meets state minimum core requirements is in **bold**.)

- Communications (6-12 hours)  
  - Choose from **English Core** courses (6 hours)
  - **COMM** 1313 Public Speaking
  - **Communication Intensive Elective** (See adviser for approved list.)
  - History or Government (3 hours)  
  - Choose from **U.S. History or Government Core** courses

- Mathematics (3 hours)  
  - Choose from **MATH Core** courses

- Sciences (16 hours)  
  - **BIOI** 1543/1541L Principles of Biology and lab or **BIOI** 2013/2011L General Microbiology and lab
  - **CHEM** 1073/1071L Fundamentals of Chemistry and lab or **CHEM** 1123/1121L University Chemistry II and lab
  - **CHEM** 2613/2611L Organic Physiological Chemistry and lab

- Other approved courses with a global emphasis, with permission of the advisor.
### Animal Science B.S.A.

#### Eight-Semester Degree Program

Students wishing to follow the degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program.

**Fall Semester Year 1**

1. ANSC 1001L Intro to Animal Science Lab
2. ANSC 1032 Intro to Animal Sciences
3. ANSC 1041 Intro to Companion Animal Industry or ANSC 1051 Intro to Livestock Industry
4. ENGL 1013 Composition I unless exempt
5. MATH 1203 College Algebra or higher level math
6. BIOL 1543/1541L Principles of Biology and lab

**Spring Semester Year 1**

2. ANSC 2252L Intro to Livestock & Meat Evaluation
3. ENGL 1023 Composition II unless exempt
4. Fine Arts/Humanities University Core Elective
5. Social Sciences University Core Elective
6. Discipline-related Elective as AFLS Broadening Elective
7. General Elective

**17 Semester hours**

### Fall Semester Year 2

1. ANSC 2781 Career Preparation & Development
2. ANSC 3433 Fundamentals of Reproductive Physiology
3. CHEM 1073/1071L Organic Chemistry I and Lab
4. CHEM 2261L University Chemistry II and Lab
5. COMM 1313 Public Speaking
6. History University Core Elective

**14 Semester hours**

### Spring Semester Year 2

3. ANSC 3133 Animal Breeding & Genetics
4. CHEM 2613/2611L Organic Physiological Chemistry or
   CHEM 3603/3601L Organic Chemistry I and Lab
5. General Elective
6. Fine Arts/Humanities University Core Elective
7. Discipline-related Elective as AFLS Broadening Elective

**15-16 Semester hours**

### Fall Semester Year 3

5. Animal Science Electives
6. Communication Intensive Elective from an approved course list.
7. BIOL 2013/2011L General Microbiology and lab
8. CHEM 2613/2611L Organic Physiological Chemistry or
   CHEM 3603/3601L Organic Chemistry I and Lab
9. Discipline-related Elective

**17-18 Semester hours**

### Spring Semester Year 3

5. Animal Science Electives
6. ANSC Production/Management Elective
7. General Electives

**11-16 Semester hours**

### Fall Semester Year 4

3. Animal Science Elective
4. ANSC Production/Management Elective
5. General Electives

**10-13 Semester hours**

### Spring Semester Year 4

2-4 ANSC Production/Management Elective
5. Discipline-related Electives
6. General Electives

**13-17 Semester hours**

**124 Total Hours**

---

**Minor in Animal Science (ANSC-M)**

A minor in Animal Science prepares students for jobs in the animal industries. A student planning to minor in animal science must consult with an animal science adviser. The minor consists of 20 hours to include the following:

- ANSC 1001L Introductory Animal Sciences Lab
- ANSC 1032 Introductory Animal Sciences
- ANSC 1041 Introduction to Companion Animal Industry or ANSC 1051 Introduction to the Livestock Industry
- ANSC 2252L Introduction to Livestock and Meat Evaluation
- ANSC 3133 Animal Breeding and Genetics
- ANSC 3433 Fundamentals of Reproductive Physiology

Choose 5 hours from:

- ANSC 4252 Cow-Calf Management
- ANSC 4262 Swine Production

**14 Semester hours**
Minor in Equine Science (EQSC-M)

A minor in Equine Science prepares students for jobs in the equine industry and is available to all students. A student planning to minor in Equine Science must notify the program adviser for consultation and more detailed information.

The minor consists of 20 hours to include the following:

- ANSC 1032 Introduction to Animal Science
- ANSC 1041 Introduction to Companion Animal Industry
- ANSC 2003 Introduction to the Equine Industry
- ANSC 3433 Fundamentals of Reproduction Physiology
- ANSC 3723 Horse and Livestock Merchandising
- ANSC 3822 Equine Law
- ANSC 4283 Horse Production with lab component
- Choose 3 hours from:
  - ANSC 2213 Behavior of Domestic Animals
  - ANSC 3003 Applied Animal Parasitology
  - ANSC 3133 Animal Breeding and Genetics
  - ANSC 3143 Principles of Animal Nutrition
  - ANSC 3333 Diseases of Livestock
  - ANSC 401V Internship (3 hours)

See Page 313 for Animal Science (ANSC) courses.

CROP, SOIL, AND ENVIRONMENTAL SCIENCES (CSES)

Robert K. Bacon
Head of the Department
115 Plant Science Building
479-575-2354
http://cses.uark.edu/

FACULTY
- Distinguished Professor Oosterhuis
- University Professor Wolf
- Professors Bacon, Bourland, Brye, Burgos, Chen, Counce, Daniels, Deren, Gbur, Longer, Miller, Mauromomoustakos, Moldenhauer, Norman, Norsworthy, Pereira, Purcell, Savin, Scott (R.), Sharpley, Slaton, Smith, Srivastava, Watson, West, Wilson
- Associate Professors Espinoza, Kelley, Ross
- Research Associate Professor Mattice
- Assistant Professors Anders, Barber, Mason, Mozaffari, Roberts, Scott (T.)

Courses in the Department of Crop, Soil, and Environmental Sciences provide fundamental and applied studies in two majors: Crop Management (CPMG) and Environmental, Soil, and Water Science (ESWS). Areas studied within the Crop Management major include crop science, production agriculture, plant breeding and genetics, crop and forage production, pest management (weeds, insects, and plant diseases), and soil fertility. The Environmental, Soil, and Water Science major includes courses in areas such as environmental science, water quality, soil science, soil and water conservation, and the sustainable productivity of natural resources.

Many graduates from both majors also choose to continue their education in graduate programs in a wide variety of disciplines both related and complementary to the B.S.A. degrees.

CROP MANAGEMENT (CPMG)

David E. Longer
CPMG Coordinator
115 Plant Science Building
479-575-2354

Opportunities for employment and postgraduate study are numerous for graduates of the Department of Crop, Soil, and Environmental Sciences. Crop Management graduates become involved in crop production or find employment in public agencies providing support services for agriculture (e.g., Extension Service, State Plant Board, Natural Resources Conservation Service), or as consultants serving production agriculture, in the agrichemical and seed industries, and in agricultural research programs.

The crop management major includes courses in crop science, production agriculture, plant breeding and genetics, crop and forage production, pest management (weeds, insects, and plant diseases), and soil fertility.

Requirements for a Major in Crop Management (CPMG)

State minimum core and discipline specific general education requirements. (Course work that meets state minimum core requirements is in bold.)

- Communications (15 hours)
  - Choose from English Core courses (6 hours) If exempt, see adviser for communications courses
  - ENGL 2003 Advanced Composition or ENGL 3053 Technical and Report Writing
  - COMM 1313 Public Speaking
  - CSES 3023 CSES Colloquium
  - U.S. History or Government (3 hours)
  - Choose from U.S. History Core courses

See Page 320 for Biological Engineering (BENG) courses.
Mathematics and Computer Science (6 hours)
  __ Choose from MATH Core courses
__ AGME 2903 Applications of Microcomputers or AGST 4023 Principles of Experimentation or STAT 2303 Principles of Statistics
  (Students minorin in Agricultural Business should choose AGME 2903.)
  __ BIOL 1543/1541L Principles of Biology and lab
  __ BIOL 1613/1611L Plant Biology and lab
  __ CHEM 1103/1101L University Chemistry I and lab
  __ CHEM 1123/1121L University Chemistry II and lab
  __ CHEM 2613/2611L Organic Physiological Chemistry and lab
  __ BIOL 4304 Plant Physiology or ANSC/POSC 3123 Principles of Genetics or BIOL 2323 General Genetics

Fine Arts and Humanities (6 hours)
  __ Choose from Fine Arts, Humanities Core courses

Social Sciences (9 hours)
  __ AGEC 1103 Principles of Agricultural Microeconomics
  __ Choose from Social Sciences Core courses (9 hours total, 3 hours must be outside AGEC/ECON discipline) Students minorin in Agricultural Business should choose AGEC 2103.

CPMG Requirements (27 hours)
  __ CSES 1011 Introduction to Crop, Soil, and Environmental Sciences
  __ CSES 2103/2101L Crop Science and lab
  __ CSES 2203/2201L Soil Science and lab
  __ CSES 4013 Advanced Crop Science
  __ CSES 4224 Soil Fertility with lab component
  __ CSES 462V Internship or CSES 400V Special Problems (3 hours)

Choose 8 hours from Group A or B. At least 2 courses must be from Group A.
Group A:
  __ CSES 3113 Forage Management
  __ CSES 3312 Cotton Production
  __ CSES 3322 Soybean Production
  __ CSES 3332 Rice Production
  __ CSES 3342 Cereal Grain Production
  __ HORT 2303 Introduction to Turfgrass Management

Group B:
  __ CSES 3214 Soil Resources and Nutrient Cycles
  __ CSES 4103 Plant Breeding with lab component
  __ CSES 4234 Plant Anatomy with lab component
  __ CSES 4253 Soil Classification and Genesis with lab component
  __ CSES 355V Soil Profile Description (1-2 hours)
  __ CSES 400V Special Problems (1-6 hours)
  __ PLPA 4333 Biotechnology in Agriculture

Pet Management (10 hours)
  __ ENTO 3013 Introduction to Entomology
  __ PLPA 3004 Principles of Plant Pathology
  __ CSES 4133 Weed ID, Morphology and Ecology

Electives for a minor: Choose 9 hours from either Group C or Group D
Group C (Pet Management):
  __ CSES 4143 Principles of Weed Control
  __ PLPA 4223 Plant Disease Control
  __ ENTO 4123 Insect Pest Management or ENTO 4133 Advanced Applied Entomology

Group D (Agricultural Business):
  __ AGEC 2303 Introduction to Agriculture
  __ AGEC 3403 Farm Business Management
  __ AGEC 3303 Food and Agricultural Marketing or AGEC 3373 Futures and Options Markets or AGEC 3413 Principles of Environmental Economics or AGEC 4313 Agricultural Business Management

General Electives (16-18 hours)
124 Total hours

Crop Management B.S.A.

Nine-Semester Degree Program

Students wishing to follow the degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1
  3  ENGL 1013 Composition I (If exempt, see adviser for communication courses.)
  3  MATH 1203 College Algebra or higher level math
  4  BIOL 1543/1541L Principles of Biology and lab
  3  History University Core Elective
  1  CSES 1011 Introduction to CSES
14 Semester hours

Spring Semester Year 1
  4  CSES 2103/2101L Crop Science and lab
  4  BIOL 1613/1611L Plant Biology and lab
  3  ENGL 1023 Composition II (If exempt, see adviser for communications courses.)
  3  COMM 1313 Public Speaking
  3  AGEC 1103 Principles of Agricultural Microeconomics
17 Semester hours

Fall Semester Year 2
  4  CHEM 1103/1101L Chemistry I and lab
  3  ENGL 2003 Advanced Composition or ENGL 3053 Technical & Report Writing
  3  Social Science University Core Elective
  3  Fine Arts/Humanities University Core Elective
  2-3  Select one (1) course from Group A on checklist
15-16 Semester hours

Spring Semester Year 2
  4  CHEM 1123/1121L Chemistry II and lab
  3  AGME 2903 Applications of Microcomputers or AGST 4023 Principles of Experimentation or STAT 2303 Principles of Statistics
  3  Social Science University Core Elective
  3  Fine Arts/Humanities University Core Elective
  2-3  Select one (1) course from Group A on checklist
15-16 Semester hours

Fall Semester Year 3
  4  PLPA 3004 Principles of Plant Pathology with lab component
  3  ENTO 3013 Introduction to Entomology
  2-4  Select one (1) course from Group B on checklist
  4  CSES 2203/2201L Soil Science and lab
  3  General Elective (Rec: CSES 2003 as pre-requisite for CSES 4133)
16-18 Semester hours

Spring Semester Year 3
  3-4  BIOL 2323 General Genetics or BIOL 4304 Plant Physiology or ANSC/POSC 3123 Principles of Genetics
  3  CHEM 2613/2611L Organic Physiological Chemistry and lab
  3  Select one (1) course from Group C or Group D for a minor
  3  General Elective
13-14 Semester hours

Summer Semester Year 3
  3  CSES 462V Internship or CSES 400V Special Problems

Fall Semester Year 4
  3  CSES 3023 CSES Colloquium
  3  CSES 4133 Weed Identification, Morphology & Ecology
  4  CSES 4224 Soil Fertility with lab component
  3  Select one (1) course from Group C or Group D for a minor
  3  General Elective
16 Semester hours

Spring Semester Year 4
  3  CSES 4013 Advanced Crop Science
  3  Select one (1) course from Group C or Group D for a minor
  6  General Electives
  1-3  General Elective
13-15 Semester hours
124 Total Hours
The YOU of A University of Arkansas, Fayetteville

ENVIRONMENTAL, SOIL, AND WATER SCIENCE (ESWS)

Mary C. Savin
ESWS Coordinator
115 Plant Science Building
479-575-5740

Opportunities for employment and post-graduate study are numerous for graduates of the Department of Crop, Soil, and Environmental Sciences. Environmental, Soil, and Water Science graduates find jobs with environmental consulting companies, environmental education organizations, state agencies (e.g., Extension Service, Department of Environmental Quality, Health Department), federal agencies (e.g., Environmental Protection Agency, Natural Resources Conservation Service), municipalities and local environmental services (e.g., waste management and recycling, water and wastewater treatment facilities, parks and tourism departments), a wide variety of private businesses, and environmental research.

The Environmental, Soil, and Water Science major includes courses in areas such as environmental science, water quality, soil science, soil and water conservation, and the sustainable productivity of natural resources.

Requirements for a Major in Environmental, Soil, and Water Science (ESWS)

State minimum core and discipline specific general education requirements:
(Course work that meets state minimum core requirements is in **bold**.)

<table>
<thead>
<tr>
<th>Communications (12 hours)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose from <strong>English Core</strong> course (6 hours) If exempt, see adviser for communication courses.</td>
<td></td>
</tr>
<tr>
<td>COMM 1313 Public Speaking</td>
<td></td>
</tr>
<tr>
<td>CSES 3023 or AGED 3142/3141L</td>
<td></td>
</tr>
<tr>
<td>U.S. History and Government (3 hours)</td>
<td></td>
</tr>
<tr>
<td>Choose from <strong>U.S. History Core</strong> courses (3 hours)</td>
<td></td>
</tr>
<tr>
<td>MATH 1203 College Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 1213 Plane Trigonometry (Higher level MATH is encouraged for students with an ACT of 26 or higher and considering graduate school.)</td>
<td></td>
</tr>
<tr>
<td>AGST 4023 Principles of Experimentation or STAT 2023 Biostatistics or STAT 2303 Principles of Statistics</td>
<td></td>
</tr>
<tr>
<td>Sciences (35-36 hours)</td>
<td></td>
</tr>
<tr>
<td><strong>BIOI 1543/1541L</strong> Principles of Biology and lab</td>
<td></td>
</tr>
<tr>
<td><strong>BIOI 2013/2011L</strong> General Microbiology and lab</td>
<td></td>
</tr>
<tr>
<td><strong>BIOI 3863/3861L</strong> General Ecology and lab or ENSC 3223/3221L Ecosystem Assessment and lab</td>
<td></td>
</tr>
<tr>
<td><strong>BIOI 1613/1611L</strong> Plant Biology or CSES 1203 Introduction to Plant Sciences</td>
<td></td>
</tr>
<tr>
<td><strong>CHEM 1103/1101L</strong> University Chemistry I and lab</td>
<td></td>
</tr>
<tr>
<td><strong>CHEM 1123/1121L</strong> University Chemistry II and lab</td>
<td></td>
</tr>
<tr>
<td><strong>CHEM 2613/2611L</strong> Organic Physiological Chemistry and lab or CHEM 3603/3601L Organic Chemistry I and lab</td>
<td></td>
</tr>
<tr>
<td><strong>GEOI 1113/1111L</strong> General Geology and lab</td>
<td></td>
</tr>
<tr>
<td><strong>PHYS 2013/2011L</strong> College Physics I and lab</td>
<td></td>
</tr>
<tr>
<td>Fine Arts and Humanities (6 hours)</td>
<td></td>
</tr>
<tr>
<td>Choose from <strong>Fine Arts, Humanities Core</strong> courses</td>
<td></td>
</tr>
<tr>
<td>Social Sciences (9 hours)</td>
<td></td>
</tr>
<tr>
<td>Choose from <strong>Social Sciences Core</strong> courses</td>
<td></td>
</tr>
<tr>
<td>ESWS Requirements (29-31 hours)</td>
<td></td>
</tr>
<tr>
<td>Environmental Science Core (11 hours)</td>
<td></td>
</tr>
<tr>
<td>CSES 1011 Introduction to CSES</td>
<td></td>
</tr>
<tr>
<td>CSES 2203/2201L Soil Science and lab</td>
<td></td>
</tr>
<tr>
<td>ENSC 1003 Environmental Science</td>
<td></td>
</tr>
<tr>
<td>ENSC 3003 Introduction to Water Science</td>
<td></td>
</tr>
<tr>
<td>Soil Science Core (3-4 hours)</td>
<td></td>
</tr>
<tr>
<td><strong>CSES 3214</strong> Soil Resources with lab component</td>
<td></td>
</tr>
<tr>
<td><strong>CSES 4224</strong> Soil Fertility with lab component</td>
<td></td>
</tr>
<tr>
<td><strong>CSES 4253</strong> Soil Classification and Genesis with lab component</td>
<td></td>
</tr>
<tr>
<td><strong>ENSC 4263</strong> Environmental Soil Science</td>
<td></td>
</tr>
<tr>
<td>Water Science Core (3-4 hours)</td>
<td></td>
</tr>
<tr>
<td><strong>ENSC 4023</strong> Water Quality</td>
<td></td>
</tr>
<tr>
<td><strong>GEOG 3333</strong> Oceanography</td>
<td></td>
</tr>
<tr>
<td><strong>GEOI 4033</strong> Hydrogeology with lab component</td>
<td></td>
</tr>
<tr>
<td><strong>BIOI 4814</strong> Limnology with lab component</td>
<td></td>
</tr>
</tbody>
</table>

Natural Resources Core (Choose 12 hours from at least 2 groups)
Methods/Techniques in Environmental Science
- **CSES 355V** Soil Profile Descriptions
- **AGME 3153** Surveying in Agriculture and Forestry
- **ENSC 3603** GIS for Environmental Science
- **ENSC 4034** Analysis of Environmental Contaminants with lab component
- **GEOI 3543** Geographic Information Science
- **Environment and Society**
  - **AGEC 3413** Principles of Environmental Economics
  - **AGEC 3503** Agricultural Law
  - **AGEC 3523** Environmental and Natural Resource Law
  - **ENSC 3933** Environmental Ethics
  - **RSOC/SOCI 4603** Environmental Sociology
- Environmental Management
  - **CSES 2013** Pest Management
  - **ENSC 3103** Plants & Environmental Restoration
  - **ENSC 3263** Environmental Soil and Water Conservation with lab component
  - **ENSC 4401** Professional Certification Preparation
  - **GEOI 3003** Conservation of Natural Resources
- General Electives (18-21 hours)

| Environmental, Soil, and Water Science B.S.A. |  |
| Eight-Semester Degree Program |  |
| Students wishing to follow the degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. |  |

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I (If exempt, see adviser for communication courses.)</td>
<td></td>
</tr>
<tr>
<td>3 ENSC 1003 Environmental Science</td>
<td></td>
</tr>
<tr>
<td>1 CSES 1011 Introduction to CSES</td>
<td></td>
</tr>
<tr>
<td>4 Science University Core — BIOL 1543/1541L Principles of Biology and lab</td>
<td></td>
</tr>
<tr>
<td>3 Social Sciences University Core Elective</td>
<td></td>
</tr>
<tr>
<td>3 Fine Arts/Humanities University Core Elective</td>
<td></td>
</tr>
<tr>
<td><strong>17 Semester hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1023 Composition II (If exempt, see adviser for communication courses.)</td>
<td></td>
</tr>
<tr>
<td>3 History University Core Elective</td>
<td></td>
</tr>
<tr>
<td>3-4 CSES 1203 Introduction to Plant Sciences or BIOL 1613/1611L Plant Biology and lab</td>
<td></td>
</tr>
<tr>
<td>3 Social Sciences University Core Elective</td>
<td></td>
</tr>
<tr>
<td>3 MATH 1203 (pre-requisite for CHEM 1103)</td>
<td></td>
</tr>
<tr>
<td><strong>15-16 Semester hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 General Elective</td>
<td></td>
</tr>
<tr>
<td>4 GEOI 1113/1111L General Geology and lab</td>
<td></td>
</tr>
<tr>
<td>4 Science University Core — CHEM 1103/1101L Chemistry I and lab</td>
<td></td>
</tr>
<tr>
<td>3 COMM 1313 Public Speaking</td>
<td></td>
</tr>
<tr>
<td>3 MATH 1213 or higher if ACT of 26 or higher (prerequisite for PHYS 2013)</td>
<td></td>
</tr>
<tr>
<td><strong>17 Semester hours</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4 CHEM 1123/1121L Chemistry II and lab</td>
<td></td>
</tr>
<tr>
<td>3 Fine Arts/Humanities University Core Elective</td>
<td></td>
</tr>
<tr>
<td>3 Social Sciences University Core Elective</td>
<td></td>
</tr>
<tr>
<td>3 ENSC 3003 Introduction to Water Science</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total hours</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>124</strong></td>
<td></td>
</tr>
</tbody>
</table>
The YOU of A

Dale Bumpers College of Agricultural, Food and Life Sciences

viser for consultation and more detailed information. The Crop Management Minor consists of 16 hours of courses and to include the following:

Spring Semester Year 3
- 3 hours of General Elective (Could apply elective toward a minor)

Fall Semester Year 4
- 3 hours of General Elective or Natural Resources Core
- 4 hours of Soil Science (May wish to take another elective. Could apply toward a minor)

16-17 Semester hours

Spring Semester Year 4
- 124 Total Hours

12-16 Semester hours

Group A:
- CSES 2103 Crop Science
- CSES 2203 Soil Science

Choose 12 hours from the following, with at least two courses from Group A.

Group A:
- CSES 3113 Forage Management
- CSES 3312 Cotton Production
- CSES 3322 Soybean Production
- CSES 3332 Rice Production
- CSES 3342 Cereal Grain Production

Group B:
- CSES 3203 Introduction to Weed Science
- CSES 3214 Soil Resources and Nutrient Cycles
- CSES 4013 Advanced Crop Science
- CSES 4103 Plant Breeding
- CSES 4133 Weed Identification, Morphology, and Ecology
- CSES 4143 Principles of Weed Control
- CSES 4224 Soil Fertility
- CSES 4234 Plant Anatomy

Minor in Environmental, Soil, and Water Science (ESWS-M)

A student planning to minor in Environmental, Soil, and Water Science must notify the program adviser for consultation and more detailed information. The Environmental, Soil, and Water Science Minor consists of 18 hours to include the following:

Environmental science (6 hours)
- ENSC 1003 Environmental Science
- Choose 3 hours from:
  - AGEC 3413 Principles of Environmental Economics
  - AGEC 3503 Agricultural Law I
  - AGEC 3523 Environmental Science and Natural Resource Law
  - BIOL 3863/3861L General Ecology and lab
  - ENSC 3103 Plants and Environmental Restoration
  - ENSC 3223/3221L Ecosystems Assessment and lab
  - ENSC 3263 Environmental Soil and Water with lab component
  - ENSC 3603 GIS for Environmental Science
  - ENSC 3933 Environmental Ethics
  - ENSC 4034 Analysis of Environmental Contaminants with lab component
  - RSOC/SOCI 4603 Environmental Sociology

Soil Science (6 hours)
- Choose 3 hours from:
  - CSES 2203 Soil Science
  - CSES 3214 Soil Resources and Nutrient Cycles with lab component
  - CSES 355V Soil Profile Descriptions
  - CSES 4224 Soil Fertility with lab component
  - CSES 4253 Soil Classification and Genesis with lab component
  - ENSC 4263 Environmental Soil Science

Water Science (6 hours)
- Choose 3 hours from:
  - ENSC 3003 Introduction to Water Science
  - ENSC 4023 Water Quality with lab component
  - GEOG 3333 Oceanography
  - GEOL 4033 Hydrogeology with lab component
  - BIOL 4814 Limnology with lab component

Minor in Crop Biotechnology (CPBT-M)

A student planning to minor in Crop Biotechnology must notify the program adviser for consultation and more detailed information. The Crop Biotechnology Minor consists of 16 hours of courses to include the following:

- BIOL 2523 General Genetics or ANSC 3123/POSC 3123 Principles of Genetics
- PLPA 4333 Biotechnology in Agriculture
- CSES 402V Special Topics in Crop Biotechnology (two 2-hour courses taken in two different semesters)

Choose 6 hours from the following:
- BIOL 4303 Plant Physiology
- CHEM 3813 Introduction to Biochemistry
- CSES 4103 Plant Breeding

Choose 3 hours from:
- CSES 4234 Plant Anatomy
- CSES 4224 Soil Fertility
- CSES 4103 Plant Breeding

Group B:
- CSES 3023 Colloquium or AGED 3142 & AGED 3141L General Ecology and lab
- CSES 3323/3321L Ecosystems Assessment and lab or BIOL 3863/3861L General Ecology and lab
- Statistics or Natural Resources Core
- 3-4 hours of Natural Resources Core
- 3-4 hours of General Elective (May wish to take another elective. Could apply toward a minor)

12-16 Semester hours

Group A:
- CSES 2203 Soil Science
- CSES 2103 Plant Science or CSES 2103 Crop Science or BIOL 1613/1611L Plant Physiology
- ENSC 3203 Introduction to Weed Science
- ENSC 3103 Plants and Environmental Restoration
- AGEC 3523 Environmental Science and Natural Resource Law
- BIOL 3863/3861L General Ecology and lab
- ENSC 3103 Plants and Environmental Restoration
- ENSC 3223/3221L Ecosystems Assessment and lab
- ENSC 3263 Environmental Soil and Water with lab component
- ENSC 3603 GIS for Environmental Science
- ENSC 3933 Environmental Ethics
- ENSC 4034 Analysis of Environmental Contaminants with lab component
- RSOC/SOCI 4603 Environmental Sociology

Soil Science (6 hours)
- Choose 3 hours from:
  - CSES 2203 Soil Science
  - CSES 3214 Soil Resources and Nutrient Cycles with lab component
  - CSES 355V Soil Profile Descriptions
  - CSES 4224 Soil Fertility with lab component
  - CSES 4253 Soil Classification and Genesis with lab component
  - ENSC 4263 Environmental Soil Science
  - ENSC 3003 Introduction to Water Science
  - ENSC 4023 Water Quality with lab component
  - GEOG 3333 Oceanography
  - GEOL 4033 Hydrogeology with lab component
  - BIOL 4814 Limnology with lab component

Minor in Crop Management (CPMG-M)

A student planning to minor in Crop Management must notify the program adviser for consultation and more detailed information. The Crop Management Minor consists of 18 semester hours of 2000-level courses or above, including the following:

- CSES 2103 Crop Science
- CSES 2203 Soil Science

Choose 12 hours from the following, with at least two courses from Group A.

Group A:
- CSES 3113 Forage Management
- CSES 3312 Cotton Production
- CSES 3322 Soybean Production
- CSES 3332 Rice Production
- CSES 3342 Cereal Grain Production

Group B:
- CSES 3003 Introduction to Weed Science
- CSES 3214 Soil Resources and Nutrient Cycles
- CSES 4013 Advanced Crop Science
- CSES 4103 Plant Breeding
- CSES 4133 Weed Identification, Morphology, and Ecology
- CSES 4143 Principles of Weed Control
- CSES 4224 Soil Fertility
- CSES 4234 Plant Anatomy

Minor in Wildlife Habitat (WLHA-M)

A student planning to minor in Wildlife Habitat must notify the program adviser for consultation and more detailed information. The Wildlife Habitat Minor consists of 20 hours of courses to include the following:

Group A (13-14 hours):
- BIOL 4734 Wildlife Management Techniques
- CSES 1203 Plant Science or CSES 2103 Crop Science or BIOL 1613/1611L Plant Biology
- CSES 2203 Soil Science
- ENSC 3103 Plants and Environmental Restoration

Choose 6-7 hours from Groups B and C, choosing at least one course from each group.

Group B:
- CSES 3003 Introduction to Water Science
- ENSC 4023 Water Quality with lab component
- GEOG 3333 Oceanography
- GEOL 4033 Hydrogeology with lab component
- BIOL 4814 Limnology with lab component
The YOU of A International experiences and selection of a minor.

Certified Culinary Scientist or a Certified Research Chef through the Research Chef’s Association. Certification will provide students with the course work necessary to be eligible to become a Certified Culinary Scientist or a Certified Research Chef through the Research Chef’s Association. Due to the diversity and abundance of opportunities available, students graduating with a B.S.A. in food science readily obtain employment or continue studies for graduate school. Additionally, requirements for several pre-professional programs can be fulfilled while meeting requirements for the food science degree.

Students may choose one of three areas of concentration for their degree program: Food Science (FDSC), Food Technology (FDTN) or Food and Culinary Sciences (FDCU). The FDSC concentration at the University of Arkansas is one of only 37 programs in the United States and the only one in Arkansas that is approved by the Institute of Food Technologists. It provides students with a strong background in basic and applied sciences and food chemistry, microbiology, analysis, quality and engineering.

The FDTN concentration provides students interested in food industry careers with an integrated background in food science and business or nutrition. Students in the food technology concentration will complete a minor in agribusiness, general business, or nutrition while completing their core requirements, thus leaving elective hours available for further educational enhancement.

The FDCU concentration provides students interested in product development careers with an interdisciplinary background in food science and culinary arts. This concentration is a partnership program with Northwest Arkansas Community College (NWACC). Students complete their culinary arts courses on the NWACC campus for transfer credit to the UA. These courses can be taken prior to admission to the UA or taken while in residence at the UA. Food and Culinary Sciences concentration will provide students with the course work necessary to be eligible to become a Certified Culinary Scientist or a Certified Research Chef through the Research Chef’s Association.

Students in each concentration are offered opportunities for research, internships, and other professional career opportunities in industry, business governmental and educational organizations associated with food and food-related products. Due to the diversity and abundance of opportunities available, students graduating with a B.S.A. in food science readily obtain employment or continue studies for graduate school. Additionally, requirements for several pre-professional programs can be fulfilled while meeting requirements for the food science degree.

Requirements for a Major in Food Science (FDSC)

State minimum core and discipline specific general education requirements: (Course work that meets state minimum core requirements is in bold.)

Communications (6-12 hours)

Choose from English Core courses (6 hours)

FDSC Concentration:

ENGL 3053 Technical and Report Writing or
AGED 3142/3141L Agri Communications and lab

FDTN or FDCU Concentration:

AGED 3142/3141L Agri Communications and lab

U.S. History and Government (3 hours)

Choose from U.S. History Core courses

Minor in Entomology (ENTO-M)

The Entomology minor will consist of a minimum of 15 semester hours to include the following:

- ENTO 2013 Introduction to Entomology
- ENTO 4024 Insect Diversity and Taxonomy
- ENTO 4013 Insect Behavior and Chemical Ecology with lab component
- ENTO 4043 Apiculture with lab component
- ENTO 4053 Insect Ecology with lab component
- ENTO 4133 Advanced Applied Entomology with lab component
- ENTO 400V Special Problems

See Page 352 for Entomology (ENTO) courses.

Group C:

- AGEC 3413 Principles of Environmental Economics
- BIOL 4763 Ornithology
- BIOL 4833 Animal Behavior
- CSES 2201L Soil Science Lab
- CSES 355V Soil Profile Descriptions
- CSES 4133 Weed ID, Morphology and Ecology
- CSES 4253 Soil Classification and Genesis
- ENTO 3013 Introduction to Entomology
- GEOG 3003 Conservation of Natural Resources
- GEOG 3343 Natural Regions of North America
- RECR 1023 Recreation and Natural Resources

A maximum of 9 hours of CSES or ENSC coursework will be allowed to count toward the student’s major as well as the Wildlife Habitat minor.
Mathematics and Statistics (9-13 hours)
- Choose from MATH Core course
FDSC Concentration:
- MATH 1213 Plane Trigonometry
- MATH 2554 Calculus I
- STAT 2303 Principles of Statistics or STAT 2023 Biostatistics or PSYC 2013 Intro to Statistics for Psychologists or AGST 4023 Principles of Experimentation
FDTN Concentration:
- MATH 2043 Survey of Calculus
- MATH 2053 Finite Mathematics (for students declaring Agricultural Business or General Business minors only)
- AGEC 2403 Quantitative Tools for Agribusiness or WCOB 1033 Data Analysis and Interpretation or STAT 2303 Principles of Statistics or AGST 4023 Principles of Experimentation
FDSC Concentration:
- MATH 2043 Survey of Calculus
- STAT 2303 Principles of Statistics or PSYC 2013 Introduction to Statistics for Psychologists
- BIOL 1543/1541L Principles of Biology and lab
- BIOL 2013/2011L General Microbiology and lab
- CHEM 1103/1101L University Chemistry I and lab
- CHEM 1123/1121L University Chemistry II and lab
FDSC Concentration:
- CHEM 2613/2611L Organic Physiological Chemistry and lab or CHEM 3603/3601L Organic Chemistry I and lab
- CHEM 3813 Introduction to Biochemistry
- PHYS 2013/2011L College Physics I and lab
FDTN Concentration:
- CHEM 2613/2611L Organic Physiological Chemistry and lab
- CHEM 3813 Introduction to Biochemistry (for students declaring General Foods and Nutrition minor only)
FDSC Concentration:
- CHEM 2613/2611L Organic Physiological Chemistry and lab
- HESC 1213 Fundamentals of Nutrition
- HESC 2113/2111L Principles of Foods and lab
- HESC 3203 Human Nutrition
- HESC 4213 Advanced Nutrition
- HESC 4243 Community Nutrition

Additional Requirements for Food Science Concentration (29 hours)
- 3000-4000 level business course from the department codes: ACCT, AGEC, ECON, FINN, ISYS, MGMT, MKTG, TLOG or WCOB
- Choose two from the following courses
  - HESC 4203 Sports Nutrition
  - HESC 4223 Life Cycle Nutrition
  - HESC 4243 Community Nutrition

Additional Requirements for Food Science Concentration (29 hours)
- FDSC 431V (3 hours) Internship in Food Science
- Complete one of the following options (students must declare chosen minor with Bumpers College Dean’s Office)
  Option 1: Agribusiness minor (AGBS-m)
    - WCOB 1120 Computer Competency Requirement (AGME 2903 may be taken instead, but hours will be counted toward elective hours)
    - AGEC 2142/2141L Agribusiness Financial Records and lab
    - AGEC 2303 Introduction to Agribusiness
    - AGEC 3303 Food and Agricultural Marketing
    - AGEC 4313 Agricultural Business Management
    - 3000-4000 level business course from the department codes: ACCT, AGEC, ECON, FINN, ISYS, MGMT, MKTG, TLOG or WCOB
  Option 2: General Business minor (GBUS-m)
    - WCOB 1120 Computer Competency Requirement
    - WCOB 1023 Business Foundations
    - MGMT 3433 Management Concepts and Organizational Behavior
    - MKTG 3433 Introduction to Marketing Strategy
    - 3000-4000 level Walton College course chosen from department codes: ACCT, ECON, FINN, ISYS, MGMT, MKTG, TLOG or WCOB
    - 3000-4000 level Walton College course chosen from department codes: ACCT, ECON, FINN, ISYS, MGMT, MKTG, TLOG or WCOB
  Option 3: General Foods and Nutrition minor (GFNU-m)
    - HESC 1213 Fundamentals of Nutrition
    - HESC 2112/2111L Principles of Foods and lab
    - HESC 3203 Human Nutrition
    - HESC 4213 Advanced Nutrition
    - Choose two from the following courses
      - HESC 2203 Sports Nutrition
      - HESC 4223 Life Cycle Nutrition
      - HESC 4243 Community Nutrition

Additional Requirements for Food and Culinary Sciences Concentration (29 hours)
- *indicates NorthWest Arkansas Community College course codes
- AGEC 1103 Food Science Orientation
- AFLS 1011 Freshman Orientation
- FDSC 1103 Introduction to Food Science
- FDSC 1201 Food Science Orientation
- FDSC 2103 Food Science Orientation
- FDSC 2310 Food Science Orientation
- FDSC 3103 Principles of Food Processing with lab component
- FDSC 3203 Food Safety and Sanitation
- FDSC 3202 Introduction to Food Law
- FDSC 3413 Introduction to Food Science
- FDSC 4103 Food Science Orientation
- FDSC 4114 Food Science Orientation
- FDSC 4123/4121L Food Microbiology and lab
- FDSC 4203 Food Process Engineering
- FDSC 431V (3 hours) Internship in Food Science
- Complete one of the following options (students must declare chosen minor with Bumpers College Dean’s Office)
  Option 1: Agribusiness minor (AGBS-m)
    - WCOB 1120 Computer Competency Requirement (AGME 2903 may be taken instead, but hours will be counted toward elective hours)
    - AGEC 2142/2141L Agribusiness Financial Records and lab
    - AGEC 2303 Introduction to Agribusiness
    - AGEC 3303 Food and Agricultural Marketing
    - AGEC 4313 Agricultural Business Management
    - 3000-4000 level business course from the department codes: ACCT, AGEC, ECON, FINN, ISYS, MGMT, MKTG, TLOG or WCOB
  Option 2: General Business minor (GBUS-m)
    - WCOB 1120 Computer Competency Requirement
    - WCOB 1023 Business Foundations
    - MGMT 3433 Management Concepts and Organizational Behavior
    - MKTG 3433 Introduction to Marketing Strategy
    - 3000-4000 level Walton College course chosen from department codes: ACCT, ECON, FINN, ISYS, MGMT, MKTG, TLOG or WCOB
    - 3000-4000 level Walton College course chosen from department codes: ACCT, ECON, FINN, ISYS, MGMT, MKTG, TLOG or WCOB
  Option 3: General Foods and Nutrition minor (GFNU-m)
    - HESC 1213 Fundamentals of Nutrition
    - HESC 2112/2111L Principles of Foods and lab
    - HESC 3203 Human Nutrition
    - HESC 4213 Advanced Nutrition
    - Choose two from the following courses
      - HESC 2203 Sports Nutrition
      - HESC 4223 Life Cycle Nutrition
      - HESC 4243 Community Nutrition

124 Total Hours
Fall Semester Year 1

- 4 Science University Core BIOL 1543/1541L Principles of Biology and lab
- 3 University Core MATH 1203 College Algebra
- 3 University Core ENGL 1023 Introduction to Food Science
- 3 University in Fine Arts/Humanities or Social Science or History
- 15 Semester hours

Fall Semester Year 2

- 4 Science University Core CHEM 1123/1121L University Chemistry II and lab
- 1 CHEM 1101L University Chemistry I lab [Credit earned when CHEM 1121L is completed with grade of "C" or better]
- 4 MATH 2554 Calculus I
- 3 COMM 1313 Public Speaking
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 15 Semester hours

Fall Semester Year 3

- 6-7 FDSC 3103 Principles of Food Processing with lab component and FDSC 4203 Quality Evaluation and Control with lab component (even years) or FDSC 4413 Sensory Evaluation of Food with lab component and FDSC 4304 Food Chemistry with lab component (odd years)
- 4 PHYS 2013/2011L College Physics I and lab
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 3 General Elective
- 16-17 Semester hours

Spring Semester Year 3

- 7-8 FDSC 4123/4121L Food Microbiology and lab and FDSC 4114 Food Analysis with lab component (even years) or FDSC 4713 Food Product and Process Development with lab component and FDSC 4754 Engineering Principles of Food Processing with lab component (odd years)
- 3 AGED 3142/3141L Agri Communications and lab or ENGL 3053 Technical and Report Writing
- 6 General Electives
- 16-17 Semester hours

Fall Semester Year 4

- 6-7 FDSC 3103 Principles of Food Processing with lab component and FDSC 4203 Quality Evaluation and Control with lab component (even years) or FDSC 4413 Sensory Evaluation of Food with lab component and FDSC 4304 Food Chemistry with lab component (odd years)
- 3 CHEM 3813 Introduction to Biochemistry
- 6 General Elective
- 15-16 Semester hours

Spring Semester Year 4

- 7-8 FDSC 4123/4121L Food Microbiology and lab and FDSC 4114 Food Analysis with lab component (even years) or FDSC 4713 Food Product and Process Development with lab component and FDSC 4754 Engineering Principles of Food Processing with lab component (odd years)
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 3 General Elective
- 13-14 Semester hours
- 124 Total hours

Food Science B.S.A., Food Technology Concentration

Nine-Semester Degree Program

Students wishing to follow the degree plan in Food Science should see page 41 in the Academic Regulations chapter for university requirements of the program. Students in the Food Technology Concentration must also minor in agribusiness, general business or nutrition.

Fall Semester Year 1

- 4 Science University Core BIOL 1543/1541L Principles of Biology and lab
- 3 University Core MATH 1203 College Algebra
- 3 University Core ENGL 1013 Composition I unless exempt
- 1 AFLS 1011 Freshman Orientation
- 1 FDSC 1011 Food Science Orientation
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 15 Semester hours

Spring Semester Year 1

- 3 FDSC 1103 Introduction to Food Science
- 3 CHEM 1103 University Chemistry I
- 3 University Core ENGL 1023 Composition II unless exempt
- 3 University Core in Social Science (business minor must choose AGEC 1103 Ag Microeconomics or ECON 2143 Basic Economics-Theory and Practice)
- 3 COMM 1313 Public Speaking
- 0 Business minors only: WCOB 1120 Computer Competency Requirement
- 15 Semester hours

Fall Semester Year 2

- 4 Science University Core CHEM 1123/1121L University Chemistry II and lab
- 1 CHEM 1101L University Chemistry I lab [Credit earned when CHEM 1121L is completed with grade of "C" or better]
- 3 FDSC 2503 Food Safety and Sanitation
- 6 Business minors only: MATH 2053 Finite Mathematics and (AGEC 2142/2141L Agribusiness Financial Records and lab or WCOB 1023 Business Foundations)
- 6 Nutrition minors only: HESC 2112/2111L Principles of Foods and Lab and HESC 1213 Fundamentals of Nutrition
- 14 Semester hours

Spring Semester Year 2

- 4 CHEM 2613/2611L Organic Physiological Chemistry and lab
- 3 Statistics Elective
- 4 MATH 2043 Survey of Calculus
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 3 General Elective
- 16 Semester hours

Fall Semester Year 3

- 6-7 FDSC 3103 Principles of Food Processing with lab component and FDSC 4203 Quality Evaluation and Control with lab component (even years) or FDSC 4413 Sensory Evaluation of Food with lab component and FDSC 4304 Food Chemistry with lab component (odd years)
- 4 BIOL 2013/2011L General Microbiology and lab
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 3 General Elective
- 16-17 Semester hours

Spring Semester Year 3

- 6-7 FDSC 4123/4121L Food Microbiology and lab and FDSC 4114 Food Analysis with lab component (even years) or FDSC 4713 Food Product and Process Development with lab component and FDSC 4754 Engineering Principles of Food Processing with lab component (odd years)
- 3 AGED 3142/3141L Agri Communications and lab or ENGL 3053 Technical and Report Writing
- 6 General Electives
- 16-17 Semester hours

Fall Semester Year 4

- 6-7 FDSC 3103 Principles of Food Processing with lab component and FDSC 4203 Quality Evaluation and Control with lab component (even years) or FDSC 4413 Sensory Evaluation of Food with lab component and FDSC 4304 Food Chemistry with lab component (odd years)
- 3 CHEM 3813 Introduction to Biochemistry
- 6 General Elective
- 15-16 Semester hours

Spring Semester Year 4

- 7-8 FDSC 4123/4121L Food Microbiology and lab and FDSC 4114 Food Analysis with lab component (even years) or FDSC 4713 Food Product and Process Development with lab component and FDSC 4754 Engineering Principles of Food Processing with lab component (odd years)
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 3 General Elective
- 13-14 Semester hours
- 124 Total hours

Summer Semester Year 3

- 3 FDSC 431V Internship in Food Science
- 3 Semester hours

Fall Semester Year 3

- 6-7 FDSC 3103 Principles of Food Processing with lab component and FDSC 4203 Quality Evaluation and Control with lab component (even years) or FDSC 4413 Sensory Evaluation of Food with lab component and FDSC 4304 Food Chemistry with lab component (odd years)
- 6 Business minors only: (AGEC 2303 Introduction to Agribusiness or Business Elective) and General Electives
- 9 Nutrition minors only: CHEM 3813 Introduction to Biochemistry and HESC 3203 Human Nutrition and General Elective
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 14-15 Semester hours

Spring Semester Year 3

- 2-3 FDSC 4713 Food Product and Process Development with lab component (odd years) or FDSC 3202 Introduction to Food Law (even years)
- 9 Business minors only: (AGEC 2303 Introduction to Agribusiness or Business Elective) and General Electives
- 9 Nutrition minors only: CHEM 3813 Introduction to Biochemistry and HESC 3203 Human Nutrition and General Elective
- 3 University Core in Fine Arts/Humanities or Social Science or History
- 14-15 Semester hours

Summer Semester Year 4

- 3 FDSC 431V Internship in Food Science
- 3 Semester hours

Fall Semester Year 4

- 6-7 FDSC 3103 Principles of Food Processing with lab component and FDSC 4203 Quality Evaluation and Control with lab component (even years) or FDSC 4413 Sensory Evaluation of Food with lab component and FDSC 4304 Food Chemistry with lab component (odd years)
- 6 Business minors only: (AGEC 4313 Agricultural Business Management or MGMT 3563 Management Concepts and Organizational Behavior) and (AGEC 3303 Food and Agricultural Marketing or MKTG 3433 Intro to Marketing Strategy)
- 6 Nutrition minors only: HESC 4213 Advanced Nutrition and HESC 4223 Life Cycle Nutrition
- 3 General Elective
- 15-16 Semester hours

Spring Semester Year 4

- 2-3 FDSC 4713 Food Product and Process Development with lab component (odd years) or FDSC 3202 Introduction to Food Law (even years)
- 3 Business minors only: Business elective
- 3 Nutrition minors only: HESC 2203 Sports Nutrition or HESC 4243 Community Nutrition
- 3 University Core in Fine Arts/Humanities or Social Science or History
Food Science B.S.A., Food and Culinary Sciences Concentration
Nine-Semester Degree Program

Students wishing to follow the degree plan in Food Science should see page 41 in the Academic Regulations chapter for university requirements of the program.
An asterisk * indicates NorthWest Arkansas Community College course codes.

Fall Semester Year 1
- Science University Core BIOL 1543/1541L Principles of Biology and lab
- University Core MATH 1203 College Algebra
- University Core ENGL 1013 Composition I unless exempt
- AFIS 1011 Freshman Orientation
- FDSC 1011 Food Science Orientation
- University Core in Fine Arts/Humanities or Social Science or History
15 Semester hours

Spring Semester Year 1
- CHEM 1103 University Chemistry I
- MATH 2043 Survey of Calculus
- University Core ENGL 1023 Comp II
- FDSC 1103 Introduction to Food Science
- FDSC 2503 Food Safety and Sanitation or CULY 1003* Safety and Sanitation
16 Semester hours

Fall Semester Year 2
- Science University Core CHEM 1123/1121L University Chemistry II and lab
- CHEM 1101L University Chemistry I lab (Credit earned when CHEM 1121L is completed with grade of "C" or better)
- COMM 1313 Public Speaking
- University Core in Fine Arts/Humanities or Social Science or History
- General Elective (must be upper division)
- CULY 1103* Introduction to Food Preparation Theory or HESC 2112/2111L Principles of Foods and Lab
16 Semester hours

Spring Semester Year 2
- CHEM 2613/2611L Organic Physiological Chemistry and lab
- Statistics Elective
- HESC 1213 Fundamentals of Nutrition
- University Core in Fine Arts/Humanities or Social Science or History
- CULY 1203* Stocks, Soups and Sauces
16 Semester hours

Fall Semester Year 3
- FDSC 3103 Principles of Food Processing with lab component and FDSC 4203 Quality Evaluation and Control with lab component (even years) or FDSC 4413 Sensory Evaluation of Food with lab component and FDSC 4304 Food Chemistry with lab component (odd years)
- BIOL 2013/2011L General Microbiology and lab
- University Core in Fine Arts/Humanities or Social Science or History
- CULY 1403* Garde Manger
16-17 Semester hours

Spring Semester Year 3
- FDSC 4713 Food Product and Process Development with lab component (odd years) or FDSC 3202 Introduction to Food Law (even years)
- University Core in Fine Arts/Humanities or Social Science or History
- General Elective (must be upper division)
- CULY 1303* Center of the Plate Applications
15 Semester hours

Summer Semester Year 3
- FDSC 431V Internship in Food Science
3 Semester hours

Fall Semester Year 4
- FDSC 3103 Principles of Food Processing with lab component and FDSC 4203 Quality Evaluation and Control with lab component (even years) or FDSC 4413 Sensory Evaluation of Food with lab component and FDSC 4304 Food Chemistry with lab component (odd years)
- University Core in Fine Arts/Humanities or Social Science or History
- General Elective (must be upper division)
- CULY 2003* World Cuisine
15-16 Semester hours

Spring Semester Year 4
- FDSC 4713 Food Product and Process Development with lab component (odd years) or FDSC 3202 Introduction to Food Law (even years)
- AGED 3142/3141L Agri Communications and lab
- General Electives (must be upper division)
- CULY 2003* World Cuisine
12 Semester hours

124 Total hours

Minor in Food Science (FDSC-M)
The Food Science Minor consists of 18 semester hours to include:
- FDSC 3103 Principles of Food Processing with lab component
- FDSC 4123/4121L Food Microbiology and lab
- FDSC 4304 Food Chemistry with lab component
Choose 7 hours from:
- FDSC 2503 Food Safety and Sanitation or CULY 1003* Safety and Sanitation (odd years)
- FDSC 4114 Food Analysis with lab component
- FDSC 4203 Quality Evaluation and Control with lab component
- HESC 1213 Fundamentals of Nutrition
A student planning to minor in food science must consult a Department of Food Science adviser.

See Page 353 for Food Science (FDSC) courses.

HORTICULTURE (HORT)

David L. Hensley
Head of the Department
316 Plant Sciences Building
479-575-2603
http://hort.uark.edu/

FACULTY
- University Professor Clark
- Professors Evans, Garcia, Hensley, Murphy, Robbins, Richardson, Rom (C.), Srivastava
- Associate Professors Andersen, Carson, Karcher, Lindstrom
- Assistant Professor McDonald
- Distinguished Professor Emeritus Moore
- University Professor Emeritus Rom (R.)
- Professors Emeriti Bradley, Einert, Klingaman, Martin
- Associate Professor Emeritus King

The Department of Horticulture offers a broad, science-based degree with technical training: Horticulture, Landscape and Turf Sciences (HLTS).
Horticulture, landscape and turf management involves selection, production, management, marketing, use and research of ornamental crops (shrubs, trees, flowers, and turf), edible crops (herbs, vegetables and fruits) and turf grasses for the economic, nutritional, aesthetic and recreational well-being of society. The major provides education and training in basic and applied sciences, arts and humanities, communication, and business and economics, to provide an understanding of the underlying principles in plant development and growth, development and use of new technologies, and the operation of a horticultural enterprise. In consultation with an academic adviser and mentor, students may individually focus their academic programs through required and elective courses to focus training in specialized areas such as production, greenhouse and floriculture sciences, turf management, golf course supervision, nursery production and management, crop production, pest management, sales and support.
services, education and training, and horticultural consulting. An internship in the industry is required to gain practical, hands-on experience.

Job opportunities for horticulturists include horticulture crop production and management, horticulture merchandising and business. Marketing, consulting, inspection, research, teaching, communications, allied industries serving horticultural producers, journalism, and developing private business. Students who specialize in landscape design and aspects of ornamental horticulture will be prepared for careers in the landscape management industry; landscape design, landscape architectural firms, private and public parks, and public agencies such as parks and recreation. Job opportunities for students studying turf management include golf course superintendent, sports field manager, turfgrass science companies, seed or sod production, commercial landscape firms, research, teaching or private consulting. Advanced study may be required for some careers.

Requirements for a Major in Horticulture, Landscape and Turf Sciences (HLTS)

State minimum core and discipline specific general education requirements:

(Course work that meets state minimum core requirements is in bold.)

Communications (6-12 hours)

- Choose from English Core courses (6 hours)
- COMM 1313 Public Speaking
- Communication Intensive Elective (3 hours) See adviser

U.S. History and Government (3 hours)
- Choose from U.S. History or Government Core courses

Mathematics (3 hours)
- Choose MATH Core courses

Sciences (16-20 hours)
- BIOL 1543/1541L Principles of Biology and lab
- BIOL 1613/1611L Plant Biology and lab
- CHEM 2613/2611L Organic Physiological Chemistry and lab
- CHEM 1073/1071L Fundamentals of Chemistry and lab or
- CHEM 1103/1101L University Chemistry I and lab and
- CHEM 1123/1121L University Chemistry II and lab

Fine Arts and Humanities (6 hours)
- Choose Fine Arts Core course
- Choose Humanities Core course

Social Sciences (9 hours)
- Choose from Social Science Core courses

Of these, 3 hours must be in AGEC or ECON

HLTS Core Requirements (21-22 hours):

- AFLS 1011 Freshman Orientation
- CSES 2203/2201L Soil Science and lab
- HORT 2003 Principles of Horticulture with lab component
- HORT 3901 Horticultural Career Development
- HORT 4403 Plant Propagation with lab component
- HORT 462V Horticulture Internship (3 hours)

Choose 6-7 hours from:
- CSES 2003 Introduction to Weed Science with lab component
- ENTO 3013 Introduction to Entomology with lab component
- PLPA 3004 Principles of Plant Pathology with lab component

Horticulture Electives (Choose 18 hours)
- HORT 2303 Introduction to Turfgrass Management with lab component
- HORT 3103 Woody Landscape Plants with lab component
- HORT 3113 Herbaceous and Indoor Plants with lab component
- HORT 3133 Advanced Woody Landscape Plants with lab component
- HORT 3303 Vegetable Crops
- HORT 4303 Turfgrass Management with lab component
- HORT 4033 Professional Landscape Installation and Construction
- HORT 4043 Professional Landscape Management
- HORT 4103 Fruit Production Science with lab component
- HORT 4503 Sustainable Nursery Production
- HORT 4603 Practical Landscape Planning
- HORT 4703 Greenhouse Management and Controlled Environment

Horticulture Electives (Choose 12 hours)

- HORT 4701L Greenhouse Management and Controlled Environment
- HORT 4803 Greenhouse Crops Production
- HORT 4801L Greenhouse Crops Production lab
- HORT 4903 Golf and Sports Turf Management with lab component
- HORT 4913 Rootzone Management for Golf and Sports Turf
- HORT 4921 Golf Course Operations
- HORT 400V Special Problems
- HORT 401V Special Topics in Horticulture, Turf or Landscape

Discipline-related electives (Choose 12 hours)

- AGME 3102/3101L Small Power Units and Turf Equipment and lab
- AGME 3153 Surveying in Agriculture and Forestry
- AGME 4973 Irrigation with lab component
- ANSC/POSC 3123 Principles of Genetics
- LARC 3914 Planting Design I
- LARC 2113 Design Communications I
- PHYS 1023/1021L Physics & Human Affairs and lab (or higher)
- WCOB (up to 9 hours) or
- any AGEC, BIOL, CHEM, CSES, ENSC, ENTO, HORT, PLPA class not taken in any other elective groups.

General Electives (19-30 hours)

124 Total Hours

Horticulture, Landscape and Turf Sciences B.S.A.

Nine-Semester Degree Plan

Students wishing to follow the degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1

1 - AFIS 1011 Freshman Orientation
2 - University Core MATH 1203 College Algebra
3 - University Core ENGL 1013 Composition I unless exempt
4 - COMM 1313 Public Speaking
5 - University Core BIOL 1543/1541L Principles of Biology and lab

14 Semester hours

Spring Semester Year 1

1 - University Core ENGL 1023/1021L Composition II unless exempt
2 - HORT 2003 Principles of Horticulture with lab component
3 - Fine Arts/Humanities University Core
4 - History Core Elective
5 - Social Science Core
6 - General Elective
16 Semester hours

Fall Semester Year 2

4 - CHEM 1073/1071L Fundamentals of Chemistry and lab
5 - Communication Intensive Class
6 - Horticulture Electives

13 Semester hours

Spring Semester Year 2

4 - University Science Core BIOL 1613/1611L Plant Biology and lab
5 - Fine Arts/Humanities University Core
6 - Horticulture Career Development
7 - Discipline-related Elective
6 - General Electives
17 Semester hours

Fall Semester Year 3

4 - CSES 2203/2201L Soil Sciences and lab
5 - Pest Management Elective
6 - Horticulture Elective
7 - Social Sciences University Core Elective
8 - Discipline-related Elective
16-17 Semester hours

Spring Semester Year 3

4 - CHEM 2613/2611L Organic Chemistry and lab

University of Arkansas, Fayetteville

Dale Bumpers College of Agricultural, Food and Life Sciences

The YOU of A
Minor in Horticulture (HORT-M)
The minor will consist of 18 hours to include the following:
- HORT 2003 Principles of Horticulture with lab component
- HORT 4403 Plant Propagation with lab component
Choose 9-11 hours from:
- HORT 2303 Introduction to Turfgrass Management
- HORT 3303 Vegetable Crops
- HORT 400V Special Problems (1-3 hours)
- HORT 4103 Fruit Production Science with lab component
- HORT 4503 Sustainable Nursery Production
- HORT 4703/4701L Greenhouse Management and Controlled Environment Horticulture and lab
- HORT 4803/4801L Greenhouse Crops Production and lab
Choose 3 hours from:
- HORT 3103 Woody Landscape Plants with lab component
- HORT 3113 Herbaceous and Indoor Plant Materials with lab component
- HORT 3133 Advanced Woody Landscape Plants with lab component

Minor in Landscape Horticulture (LHRT-M)
The minor will consist of 18 hours to include:
- HORT 2003 Principles of Horticulture with lab component
- HORT 4043 Prof Landscape Management
Choose 3 hours from:
- LARC Studio Course
- LARC 3734 Landscape Architecture Construction III
- HORT 3103 Woody Landscape Plants with lab component
- HORT 3113 Herbaceous and Indoor Plant Materials with lab component
Choose 6-8 additional hours from:
- HORT 2303 Introduction to Turfgrass Management
- HORT 3103 Woody Landscape Plants with lab component
- HORT 3113 Herbaceous and Indoor Plant Materials with lab component
- HORT 3403 Turfgrass Management with lab component
- HORT 400V Special Problems (1-3 hours)
- HORT 4033 Professional Landscape Installation and Construction
- HORT 4043 Professional Landscape Management

Minor in Turf Management (TURF-M)
18 to 20 hours to include the following:
- HORT 2303 Intro to Turfgrass Management
- HORT 3403/3400L Turf Management Laboratory

Choose 3 hours from:
- HORT 4903/4900L Golf and Sports Turf Management
- HORT 4913/4910L Rootzone Management for Golf and Sports Turf

See Page 365 for Horticulture (HORT) courses.

PLANT PATHOLOGY (PLPA)

Rick Bennett
Head of the Department
217 Plant Sciences Building
479-575-2445
http://plantpathology.uark.edu

FACULTY

• University Professors Robbins, TeBeest
• Professors Bennett, Correll, Kirkpatrick, Korth, Milus, Rothrock, Rupe
• Associate Professors Coker, Spradley
• Assistant Professors Bluhm, Faske, Vann, Tzanetakis, Wameshi
• Research Assistant Professor Sayler
• Adjunct Professor Cartwright (K.)
• Adjunct Associate Professors Brooks, Chen, du Toit, Jia
• Adjunct Emeritus Professor Gergerich

Plant pathology is the study of interrelationships of plants with the abiotic and biotic agents that affect plant health and productivity. The goal of the discipline is to minimize the impact of plant diseases on agricultural production and human health. Scientific training within the department focuses on the nature, cause, and management of plant diseases.

Plant pathology is a graduate degree program. Undergraduate students interested in plant pathology should pursue a minor in pest management or plant pathology. See page 95 for degree requirements.

Minor in Plant Pathology (PLPA-M)

A student planning to minor in plant pathology should notify the Department of Plant Pathology and consult an adviser. A minor in Plant Pathology consists of 19 hours to include the following:
- PLPA 3004 Principles of Plant Pathology
- PLPA 400V Research (3 hours)
Choose 3 hours from:
- PLPA 4223 Plant Disease Control
- PLPA 4304 Applied Plant Disease Management
Choose 9 hours from:
- BIOL 4353 Ecological Genetics
- BIOL 4304 Plant Physiology
- BIOL 4353 Ecological Genetics
**PEST MANAGEMENT (PMGT)**

Nilda Burgos  
Program Coordinator  
ALTH 222  
479-575-2445

**FACULTY**
- All faculty in the Department of Plant Pathology, Entomology, and the discipline of Weed Science in the Department of Crop, Soil, and Environmental Sciences are faculty in the discipline of Pest Management.

**Minor in Pest Management (PMGT-M)**

Students interested in this area of study must declare their intention to the program coordinator. A minor in Pest Management consists of 19 hours to include two courses from each pest discipline: Entomology (ENTO), Plant Pathology (PLPA), and Weed Science (CSES):

- **ENTO 3013 Introduction to Entomology**  
- **PLPA 3004 Principles of Plant Pathology**

In addition, students may select from the following courses:

- **CSES 2003 Introduction to Weed Science**  
- **CSES 4133 Weed Identification, Morphology, and Ecology**  
- **CSES 4143 Principles of Weed Control**  
- **ENTO 4123 Insect Pest Management**  
- **ENTO 4133 Advanced Applied Entomology**  
- **PLPA 4223 Plant Disease Control**  
- **PLPA 4304 Applied Plant Disease Management**

**POULTRY SCIENCE (POSC)**

Michael T. Kidd  
Head of the Department  
0114 Poultry Science Center  
479-575-4952  
http://www.poultryscience.uark.edu/

**FACULTY**
- **University Professors**: Chapman, Waldroup  
- **Professors**: Anthony, Bottje, Clark, Coon, Donoghue (D.), Erf, Goodwin, Harrig, Kidd, Kuenzel, Li, Marcy, Ricke, Slavik, Thaxton, Watkins, Wideman  
- **Research Professors**: Donoghue (A.), Huff (G.), Huff (W.), Rath  
- **Adjunct Professors**: Bacon, Bristor, Fryar, Hanning, Rhoads, Zelenka  
- **Associate Professors**: Bramwell, Kwon, Owens-Hanning  
- **Assistant Professor**: Kong  
- **Adjunct Assistant Professors**: Linton, Stephens  
- **Adjunct Research Assistant Professor**:

A major in poultry science is designed to provide the scientific and technical education to prepare students for positions of leadership and responsibility in the expanding fields of production, processing, marketing, and distribution of meat, eggs, and related poultry products. The curriculum also prepares students for career opportunities in specialized areas of nutrition, breeding, genetics, physiology, management, food science, immunology, and disease.

Elective hours allow students to select a minor and thus personalize their degree. Elective hours can also be used to emphasize areas of business, production, processing or science. Pre-veterinary medicine, pre-medical, or pre-pharmacy requirements may be fulfilled while meeting degree requirements.

Curricula are designed to permit the student to obtain the necessary foundation to pursue graduate study for the master's and doctoral degrees. Advanced degrees are offered but not limited to the areas of nutrition, genetics, physiology, product technology, and poultry health.

**Requirements for a Major in Poultry Science (POSC)**

- **State minimum core and discipline specific general education requirements**: (Course work that meets state minimum core requirements is in bold.)
  - **Communications (6-12 hours)**
    - Choose from **English Core** courses (6 hours)
    - **COMM 1313 Public Speaking**
    - **Communication Intensive Elective (3 hours) See adviser**
  - **U.S. History and Government (3 hours)**  
    - Choose from **U.S. History and Government Core** courses
  - **Mathematics and Statistics (6-7 hours)**
    - Choose **MATH Core course**
    - **AGEC 2403 Quantitative Tools for Agribusiness or STAT 2303 Principles of Statistics or AGST 4023 Principles of Experimentation**
  - **17-24 hours**
    - **BIOL 1543/1541L Principles of Biology and lab**  
    - **BIOL 2013/2011L General Microbiology and lab**
    - Choose either:
      - **CHEM 1073/1071L Fundamentals of Chemistry and lab**
      - **CHEM 1103/1101L University Chemistry I and lab and CHEM 1123/1121L University Chemistry II and lab**
    - Choose either:
      - **CHEM 2613/2611L Organic Physiological Chemistry and lab**
      - **CHEM 3603/3601L Organic Chemistry and lab and CHEM 3613/3611L Organic Chemistry II and lab**
      - **Fine Arts and Humanities (6 hours)**
    - **Choose from Fine Arts, Humanities Core**
  - **Social Sciences (9 hours)**
    - **AGEC 1103 Principles of Agricultural Microeconomics or ECON 2023 Principles of Microeconomics**
    - Choose **Social Sciences Core** courses (6 hours)
  - **Poultry Science Core (27 hours)**
    - **POSC 1002 (Intro to Poultry Careers)**
    - **POSC 1012 (Avian Biology)**
    - **POSC 2343 (Poultry Production & Mgmt w/ Lab)**
    - **POSC 2353 (Breeder Production & Mgmt w/ Lab)**
    - **POSC 3223 (Poultry Diseases)**
    - **POSC 3554 (Avian Anatomy w/ lab)**
    - **POSC 3123 (Principles of Genetics) or POSC 4333 (Poultry Breeding & Genetics) or BIOL 2323 (Genetics)**
    - **POSC 4314 (Egg and Meat Technology w/ lab)**
    - **POSC 4343 (Poultry Nutrition)**
  - **Poultry Science Controlled Electives (15 hours)**
    - (Select 6 hours from the following)
    - **AGEC 2303 (Introduction to Agribusiness)**
    - **PHYS 2013/2011L (College Physics I)**
    - **PHYS 2033/2031L (College Physics II)**
    - **POSC 3032 (Physiology I)**
    - **POSC 3042 (Physiology II)**
    - **POSC 4213 (Integrated Poultry Management Systems)**
    - (Select 3 hr from the following)
    - **POSC 4801 (Seminar: Research Topics)**
    - **POSC 4811 (Seminar: Professionalism)**
    - **POSC 4821 (Seminar: Problem Solving)**

See Page 396 for Plant Pathology (PLPA) courses.
Poultry Science B.S.A.
Eight-Semester Degree Program

Students wishing to follow the degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1
- 4 University Core BIOL 1543/1541L Principles of Biology and lab
- 3 University Core ENGL 1013 Composition I unless exempt
- 3 COMM 1313 Public Speaking
- 2 POSC 1002 Introduction to Poultry Careers
- 3 FNAR/Humanities University Core Elective
- 1 AFLS 1011 Freshman Orientation

16 Semester hours

Spring Semester Year 1
- 2 POSC 1012 Avian Biology
- 3 University Core ENGL 1023 Composition II unless exempt
- 3 University Core MATH 1203 College Algebra or higher level math
- 3 FNAR/Humanities University Core Elective
- 3 Social Science Core Elective

14 Semester hours

Fall Semester Year 2
- 3 POSC 2343 Poultry Production and Mgmt with Lab
- 4 University Core CHEM 1103/1101L Chemistry I and lab or CHEM 1073/1071L Fundamentals of Chemistry and lab
- 3 History University Core Elective
- 3 Social Science Core AGEC 1103 Principles of Agricultural Microeconomics or ECON 2023 Principles of Microeconomics

16 Semester hours

Spring Semester Year 2
- 3 POSC 2353 Breeder Production and Mgmt with Lab
- 4 CHEM 2613/2611L Organic Physiological Chemistry and lab or CHEM 1123/1121L Chemistry II and lab (if CHEM 1103/1101L taken previous fall)
- 4 POSC 3554 Avian Anatomy with lab component
- 3 Social Science Core Elective
- 3 Communication Intensive Elective

17 Semester hours

Fall Semester Year 3
- 4 BIOL 2013/2011L General Microbiology and lab
- 3-4 CHEM 3603/3601L Organic Chemistry I and lab (if CHEM 1103/1101L and CHEM 1123/1121L taken previously) or General Elective
- 3 POSC 4333 Poultry Breeding or POSC/ANSC 3123 Principles of Genetics
- 2-4 POSC Elective (from PHYS 2033/2031L College Physics II and lab, POSC 3042 Animal Physiology II; AGEC 2303 Introduction to Agribusiness, POSC 4213 Integrated Poultry Management)

13-16 Semester hours

Spring Semester Year 3
- 3-4 CHEM 3612/3611L Organic Chemistry II and lab (if CHEM 3603/3601L taken previously) or General Elective

10-12 Semester hours

120 Total hours

Minor in Poultry Science (POSC-M)

A student planning to minor in poultry science should consult a departmental adviser. The minor consists of 15 hours to include the following:
- 2-4 POSC Elective (from PHYS 2033/2031L College Physics II and lab, POSC 3042 Animal Physiology II; AGEC 2303 Introduction to Agribusiness, POSC 4213 Integrated Poultry Management)
- 3 Upper-Division POSC Elective
- 3 Discipline-Related Elective
- 3 General Elective or BIOL 2323 General Genetics

14-17 Semester hours

Fall Semester Year 4
- 3 POSC 3223 Poultry Diseases
- 4 POSC POSC 4314 Egg and Meat Technology
- 3 Upper-Division POSC Elective
- 3 AGEC 2403 Quantitative Tools for Agribusiness or General Elective
- 3 Discipline-Related Elective
- 1 POSC 4811 or POSC 4831 Undergraduate Seminar

17 Semester hours

Spring Semester Year 4
- 1 POSC 4801 Undergraduate Seminar
- 3 STAT 2303 Principles of Statistics or AGST 4023 Principles of Experimentation (Pre-MATH 1203 or higher) or General Elective
- 2-4 POSC Controlled Elective (from PHYS 2033/2031L College Physics II and lab, POSC 3042 Animal Physiology II; AGEC 2303 Introduction to Agribusiness, POSC 4213 Integrated Poultry Management) or General Elective

See Page 398 for Poultry Science (POSC) courses.

Certificates of Proficiency in Hazard Analysis and Critical Control Point (HACCP) and Food Safety Manager (FMGR) recognize students who take a concentrated core of web-based courses focused on the application of scientifically-based food safety systems through the application of HACCP systems.

Students who earn the HACCP certificate will have a working knowledge of fundamental food microbiology, food sanitation, applicable law, statistical process control, and advanced HACCP applications in food processing industries. Prerequisites for acceptance: applicants to the HACCP Coordinator Certificate of Proficiency Program must have completed a B.S. degree or have at least seven years relevant experience in the food industry.

HACCP Certificate Requirements:

15 hours of Web-based courses:
- FDSC 2503 Food Safety and Sanitation
- FDSC 3202 Introduction to Food Law
- HLSC 4623 Human Diseases
- POSC 4033 Statistical Process Control in the Food Industry

Students who earn the Food Safety Manager (FMGR) Certificate of Proficiency will have a working knowledge of advanced food microbiology, food process engineer-
ing, human diseases, and quality management as applied in food processing industries. Applicants to the Food Safety Manager Certificate of Proficiency must have completed the HACCP certificate program of study.

FMGR Certificate requirements:
15 hours of Web-based courses:
- FDSC 3753 Introduction to Food Engineering Principles
- FDSC 4823 Principles of Food Microbiology
- HESC 4613 Principles of Epidemiology
- INEG 4323 Quality Engineering and Management
- POSC 4023 Advanced Topics in Food Safety Management

SCHOOL OF HUMAN ENVIRONMENTAL SCIENCES (HESC)

Mary M. Warnock
Director
118 Home Economics Building
479-575-4305
http://hesc.uark.edu/

FACULTY
- Professors Farmer, Harrington, Robertson, Turner, Warnock
- Associate Professors Apple, Bailey, Killian, Revelle, Southward
- Assistant Professors Henk, Ogbeide, Smith, Way, Wiersma
- Clinical Assistant Professor Moore
- Instructors Baldwin, Carpenter, Cheramie, Crandall, Harding, Powell

The School of Human Environmental Sciences at the University of Arkansas prepares students for a wide variety of professional careers in education, industry, business, government, and community services. The school is concerned with improving the quality of life for individuals and families as they exist and function in society. Human environmental sciences draw knowledge from research, from the physical, biological, and social sciences, and from arts and humanities. It relates this knowledge to an understanding of individuals' and families' needs and goals for food, clothing, shelter, management of resources, and human development and relationships. The School of Human Environmental Sciences has made a substantial contribution to the development of individuals and families through undergraduate and graduate preparation of human environmental scientists and through research in human nutrition, foods, human development, family sciences, apparel, and textiles.

The four majors of the B.S.H.E.S. degree have been accredited by the Council for Professional Development of the American Association of Family and Consumer Sciences.

See page 75 for list of majors, concentrations, minors.
See page 77 for college academic requirements and graduation requirements.

APPAREL STUDIES (APST)

Laurie M. Apple
Area Coordinator
216 Home Economics Building
479-575-4579

The Apparel Studies program opens the door to careers in the fashion industry. Buyer, product development specialist, fashion coordinator, sales consultant, visual display artist, and quality assurance technician are only a few of the possibilities. Classes in business, retailing, apparel production, science, social science, and the liberal arts give students a basic knowledge about the textile and apparel industries. By selecting from a variety of minors, students can tailor this program to meet their goals. Program strengths include guest speakers who provide insight into today's careers, tours of major fashion centers, and internships, which provide valuable career experience.

Requirements for a Major in Apparel Studies (APST)
State minimum core and discipline specific general education requirements:
(Course work that meets state minimum core requirements is in bold.)
Communications (6-12 hours)
- Choose from English Core courses (6 hours)
- COMM, ENGL, JOUR or Foreign Language
- COMM 1313 Public Speaking
- U.S. History and Government (3 hours)
- Choose from U.S. History and Government Core courses
Mathematics and Statistics (8 hours)
- Choose MATH Core course
- MATH 2053 Finite Mathematics or higher level course
- Sciences (8 hours)
- Choose Science Core courses
Fine Arts and Humanities (6 hours)
- Choose from Fine Arts, Humanities Core courses
- Social Sciences (9 hours)
- ECON 2143 Basic Economics
- PSYC 2003 General Psychology
- ANTH 1023 Intro to Cultural Anthropology or
- SOCI 2013 General Sociology
Foreign Language (6 hours)
Must be consecutive courses in the same language
APST Requirements:
- Human Environmental Sciences (55 hours)
- HESC 1501 Orientation
- HESC 1013 Introduction to Clothing Concepts
- HESC 1023 Introduction to Apparel Production
- HESC 1053 Computer-Based Methods for Apparel
- HESC 2013 Quality Assessment of Apparel
- HESC 2023 Visual Merchandising
- HESC 2053 Intro to Textile Science
- HESC 3003 Apparel Production
- HESC 3013 Introduction to Fashion Merchandising
- HESC 3033 Fashion Merchandising Methods
- HESC 4023 Advanced Apparel Merchandising
- HESC 4033 Advanced Textile Study
- HESC 4043 History of Apparel
- HESC 4053 Contemporary Apparel
- HESC 4063 Advanced Apparel Production
- HESC 4071 Apparel Studies Pre-Internship
- HESC 4082 Apparel Studies Internship
- HESC 4901 Apparel Studies Pre-Study Tour
- HESC 4912 Apparel Studies Study Tour
- HESC 1213 Fundamentals of Nutrition
- HESC 2413 Family Relations
- Marketing (3 hours)
- MKTG 3433 Introduction to Marketing Strategy
- Computers (6 hours)
- Computer Course (3 hours)
- AGED 4243 Graphic Design in AFLS
- General Electives (10-16 hours)
124 Total Hours

Apparel Studies B.S.H.E.S.
Ten-Semester Degree Program
Students wishing to follow the degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. A description of HESC courses is listed on page 359.

Fall Semester Year 1
3 University Core ENGL 1013 Composition I unless exempt
3 University Core MATH course
3 University Core FINE ARTS Category a
FOOD, HUMAN NUTRITION, AND HOSPITALITY (FHNH)

Robert J. Harrington  
Area Coordinator  
17E Home Economics Building  
479-575-4700

The curriculum in Food, Human Nutrition, and Hospitality allows students to prepare for a career in a specialized area of foods and nutrition by completing a common set of basic courses and one of the concentrations:

A: Dietetics (DIET)  
B: General Foods and Nutrition (GFNU), and  
C: Hospitality and Restaurant Management (HRMN).

Interest and aptitude for the biological and physical sciences that support nutrition science are needed to successfully complete concentrations in Dietetics and General Foods and Nutrition. Hospitality and Restaurant Management is the best choice for those students who have an interest in management and who enjoy working with people.

Dietetics (DIET)

Dietetics is for the student who intends to become a Registered Dietitian (RD), a credential that is required for one to counsel individuals related to any type of diet. Courses required are those necessary as prerequisites to application for a post-baccalaureate dietetic internship. Upon successful completion of the post-baccalaureate dietetic internship, the graduate is eligible to take the Registration Exam, the board examination for the RD credential. Graduates of this program who choose not to apply for a post-baccalaureate dietetic internship are eligible upon completion of the Bachelor’s degree to take the board examination to become a Dietetic Technician, Registered (DTR).

Dietetics Concentration Requirements

State minimum core and discipline specific general education requirements:  
(Course work that meets state minimum core requirements is in **bold**.)

Communications (6-12 hours)
- **Choose from English Core** courses (6 hours)
- **ENGL 3053 Technical and Report Writing** or **COMM 1313 Public Speaking**
- **AGED 3142/3141L Agri Communications** or **JOUR 3123 Feature Writing**

U.S. History and Government (3 hours)
- **Choose from U.S. History and Government Core** courses

Mathematics (3 hours)
- **Choose MATH Core** course

Social Sciences (9 hours)
- Select 4 or 8 hours:
  - **CHEM 1073/1071L Fundamentals of Chemistry** and lab or **CHEM 1103/1101L University Chemistry I** and lab  
  - **CHEM 1123/1121L University Chemistry II** and lab

Select 8 hours:
- **Biol 2213/2211L Human Physiology** and lab or **Biol 2443/2441L Human Anatomy** and lab  
- **Biol 2613/2611L Organic Physiological Chemistry** and lab or **CHEM 3813 Introduction to Biochemistry**  
- **Biol 3013/3011L General Microbiology** and lab  
- **ANSC 3032 Animal Physiology I** and **ANSC 3042 Animal Physiology II**

And take:
- **CHEM 2013/2011L General Microbiology** and lab

Fine Arts and Humanities (6 hours)
- **Choose from Fine Arts, Humanities Core** courses
General Foods and Nutrition (GFNU)

Students taking this concentration are encouraged to select an approved minor from the Bumpers, Walton, or Fulbright colleges or plan other combinations of courses to prepare for non-traditional vocations including work in community or government sponsored programs, wellness and health maintenance centers, public relations in the food industry, TV/media outlets for food and nutrition information, and international food or nutritional programs.

General Foods & Nutrition Concentration Requirements:

State minimum core and discipline specific general education requirements:

(Course work that meets state minimum core requirements is in bold.)

Communications (6-12 hours)
- Choose from English Core courses (6 hours)
- ENGL 3053 Technical and Report Writing or JOUR 3123 Feature Writing or AGED 3142/3141L Agri Communications and lab
- COMM 1313 Public Speaking

U.S. History and Government (3 hours)
- Choose from U.S. History and Government Core courses

Mathematics (3 hours)
- Choose MATH Core course

Sciences (23-27 hours)
Select 4 or 8 hours:
- CHEM 1073/1071L Fundamentals of Chemistry and lab or CHEM 1103/1101L University Chemistry I and lab and CHEM 1123/1121L University Chemistry II and lab
- BIOL 2443/2441L Human Anatomy and lab or BIOL 2443/2441L Principles of Biology and lab and ANSC 3042 Animal Physiology I and ANSC 3042 Animal Physiology II
And take:

- CHEM 2613/2611L Organic Physiological Chemistry and lab
- CHEM 3813 Introduction to Biochemistry
- BIOL 2113/2111L General Microbiology and lab

Physical Education (2 hours, see course listing under PEAC or DEAC)

Fine Arts and Humanities (6 hours)

- Choose from Fine Arts, Humanities Core courses

Social Sciences (9 hours)

- PSYC 2003 General Psychology
- HESC 2413 Family Relations
- Choose Social Sciences Core courses (3 hours)

GFNU Requirements (40-42 hours)

- HESC 1201 Introduction to the Dietetic Profession OR HESC 1603 Introduction to Hospitality Management
- HESC 1213 Fundamentals of Nutrition
- HESC 1501 Orientation to HESC
- HESC 2112/2111L Principles of Foods and lab
- HESC 2203 Sport Nutrition
- HESC 2603 Purchasing and Cost Control
- HESC 3203 Human Nutrition
- HESC 3213 Communication in Nutrition and Dietetics
- HESC 3604 Menu, Layout, and Food Preparation
- HESC 3653 Food Systems Management
- HESC 4103 Experimental Foods
- HESC 4213 Advanced Nutrition
- HESC 4223 Life Cycle Nutrition
- HESC 4243 Community Nutrition
- HESC 425V Food and Nutrition Seminar (1 hour)

General Electives (20-32 hours)

Recommended:

- EXED 3023 Introduction to the Cooperative Extension Service

124 Total Hours

Food, Human Nutrition and Hospitality B.S.H.E.S.,

General Foods and Nutrition Concentration

Eight-Semester Degree Program

Students wishing to follow the degree plan in Food, Human Nutrition and Hospitality should see page 41 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1

- Science Core CHEM 1103/1101L Chemistry I and lab
- Math Core MATH 1203 College Algebra OR higher level math
- HESC 1501 Orientation to HESC
- HESC 1213 Fundamentals of Nutrition
- English Core ENGL 1013 Composition I unless exempt
- PEAC OR DEAC
- 15 Semester hours

Spring Semester Year 1

- Science Core CHEM 1123/1121L Chemistry II and lab
- English Core ENGL 1023 Composition II unless exempt
- Science Core BIOL 1543/1541L Principles of Biology and lab
- COMM 1313 Public Speaking
- PEAC OR DEAC
- 15 Semester hours

Fall Semester Year 2

- ANSC 3032 Animal Physiology I OR BIOL 2213/2211L Human Physiology and lab OR BIOL 2443/2441L Human Anatomy and lab
- HESC 2112/2111L Principles of Foods and lab
- Social Science Core HESC 2413 Family Relations
- HESC 1201 Introduction to the Dietetic Profession OR HESC 1603 Introduction to Hospitality Management
- 15-19 Semester hours

Spring Semester Year 2

- CHEM 2613/2611L Organic Physiological Chemistry and lab
- ANSC 3042 Animal Physiology II OR BIOL 2223/2221L Human Physiology and lab OR BIOL 2443/2441L Human Anatomy and lab
- HESC 2203 Sports Nutrition
- Social Science Core PSYC 2003 General Psychology
- History Core Elective
- General Elective
- 18-20 Semester hours

Fall Semester Year 3

- CHEM 3813 Introduction to Biochemistry
- HESC 3213 Communication in Nutrition and Dietetics
- HESC 3653 Food Systems Management
- Fine Arts/Humanities Core Elective
- HESC 2603 Purchasing and Cost Control
- 15 Semester hours

Spring Semester Year 3

- HESC 3203 Human Nutrition
- HESC 4103 Experimental Foods with lab component
- HESC 4243 Community Nutrition
- ENGL 3053 Technical and Report Writing OR JOUR 3123 Feature Writing OR AGED 3142/3143L Communication and lab
- Social Science Core Elective
- 15 Semester hours

Fall Semester Year 4

- HESC 4213 Advanced Nutrition
- HESC 4223 Life Cycle Nutrition
- HESC 425V Food and Nutrition Seminar (1 hour)
- HESC 3604 Menu, Layout, and Food Preparation with lab component
- BIOL 2113/2111L Microbiology and lab
- General Elective
- 17 Semester hours

Spring Semester Year 4

- HESC 425V Food and Nutrition Seminar
- General Electives
- 7-13 Semester hours
- 124 Total Hours

Hospitality and Restaurant Management (HRMN)

Students in the hospitality and restaurant management concentration prepare themselves for managerial positions in the restaurant and hospitality industry. This dynamic curriculum provides students with skills in foods and business, as well as hospitality and restaurant management. Students have the opportunity to manage and operate a restaurant on campus. Students obtain hands-on experience by completing 300 hours of satisfactory, verifiable work experience in the hospitality and restaurant industry, usually completed during the summer and on part-time jobs during the school year. This work experience must be completed prior to graduation. A management internship, which allows students to acquire practical management experience and specialized knowledge from supervised work in a hotel, restaurant, or other hospitality-related business, is also part of this degree. Students in this program can complete a minor in business.

Hospitality and Restaurant Management Concentration Requirements:

State minimum core and discipline specific general education requirements:
(Course work that meets state minimum core requirements is in **bold**.)

- Communications (6-12 hours)
  - Choose from English Core courses (6 hours)
  - AGED 3142/3143L Ag Communication and lab
  - COMM 1313 Public Speaking
  - U.S. History and Government (3 hours)
  - Choose from U.S. History and Government Core courses
  - Mathematics and Computers (3 hours)
<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester Year 2</td>
<td>1. HESC 1501 Orientation to HESC</td>
</tr>
<tr>
<td></td>
<td>2. AGME 2903 Ag and HES Microcomputer</td>
</tr>
<tr>
<td></td>
<td>17 Semester hours</td>
</tr>
<tr>
<td>Fall Semester Year 3</td>
<td>3. HESC 2112/2111L Principles of Foods and lab</td>
</tr>
<tr>
<td></td>
<td>4. Social Sciences Core PSYC 2003 General Psychology or SOCI 2013 General Sociology</td>
</tr>
<tr>
<td></td>
<td>5. FDS 2503 Food Safety and Sanitation</td>
</tr>
<tr>
<td></td>
<td>6. HESC 2633 Hotel and Resort Operations Management</td>
</tr>
<tr>
<td></td>
<td>7. General and Hospitality Electives</td>
</tr>
<tr>
<td></td>
<td>15 Semester hours</td>
</tr>
<tr>
<td>Spring Semester Year 2</td>
<td>3. History or Government Core Course Elective</td>
</tr>
<tr>
<td></td>
<td>4. General or Hospitality Elective</td>
</tr>
<tr>
<td></td>
<td>5. HESC 2603 Purchasing and Cost Control</td>
</tr>
<tr>
<td></td>
<td>6. ECON 2143 Basic Economics - Theory and Practice</td>
</tr>
<tr>
<td></td>
<td>7. General and Hospitality Electives</td>
</tr>
<tr>
<td></td>
<td>14 Semester hours</td>
</tr>
<tr>
<td>Fall Semester Year 4</td>
<td>3. HESC 4643 Meeting, Events and Convention Management</td>
</tr>
<tr>
<td></td>
<td>4. AGEC 3303 Food &amp; Ag Marketing or MKTG 3433 Principles of Marketing</td>
</tr>
<tr>
<td></td>
<td>5. HESC 4653 Global Travel &amp; Tourism Management</td>
</tr>
<tr>
<td></td>
<td>6. HESC 3653 Food Systems Management</td>
</tr>
<tr>
<td></td>
<td>7. General and Hospitality Electives</td>
</tr>
<tr>
<td></td>
<td>14 Semester hours</td>
</tr>
<tr>
<td>Spring Semester Year 4</td>
<td>4. HESC 3604 Menu, Layout, and Food Preparation with lab component</td>
</tr>
<tr>
<td></td>
<td>5. HESC 3633 Front Office Revenue Management</td>
</tr>
<tr>
<td></td>
<td>6. General and Hospitality Electives</td>
</tr>
<tr>
<td></td>
<td>14 Semester hours</td>
</tr>
<tr>
<td>Summer Semester Year 4</td>
<td>3. HESC 4693 Hospitality Management Internship</td>
</tr>
<tr>
<td></td>
<td>3. Semester hours</td>
</tr>
<tr>
<td></td>
<td>124 Total Hours</td>
</tr>
</tbody>
</table>

**Minor in General Foods and Nutrition (GFNU-M)**

18 hours to include the following:

- HESC 1213 Fundamentals of Nutrition
- HESC 2112/2111L Principles of Foods and lab
- HESC 3201 Human Nutrition
- HESC 4213 Advanced Nutrition

Choose 6 hours from:

- HESC 2201 Sports Nutrition
- HESC 4223 Life Cycle Nutrition
- HESC 4243 Community Nutrition
- HESC 425V Food and Nutrition Seminar (may be taken 1 to 2 times for a total of 2 credits)
GENERAL HUMAN ENVIRONMENTAL SCIENCES (Ghes)

Mary M. Warnock
Director
118 Home Economics Building
479-575-4305

The general human environmental sciences curriculum serves students seeking a background in all of the subject-matter areas of human environmental sciences. The general curriculum prepares students for careers in social services, business, and the Cooperative Extension Service. Liberal elective hours allow students to select courses and programs to meet individual needs.

Students may be certified by the Arkansas State Board of Education to teach family and consumer sciences in Arkansas public schools by combining the pre-professional education courses as electives and completing the Master of Arts in teaching (M.A.T.) degree requirements. (See M.A.T., page 237). At the beginning of the sophomore year, students should consult with their advisers to schedule the general education and pre-professional education courses.

Requirements for a Major in General Human Environmental Sciences (HESC)

State minimum core and discipline specific general education requirements: (Course work that meets state minimum core requirements is in bold.)

Communications (3-9 hours)
- Choose from English Core courses (6 hours)
- COMM 1313 Public Speaking

History and Government (3 hours)
- Choose from U.S. History and Government Core courses
- Mathematics and Computers (6 hours)
- Choose MATH Core course
- CIED 1003 Introduction to Technology in Education

Science (8 hours)
- __CHEM 1073/1071L Fundamentals of Chemistry and lab or
- __CHEM 1103/1101L University Chemistry I and lab
- Choose from Science Core courses with lab (4 hours)
- Fine Arts and Humanities (6 hours)
- __Choose from Fine Arts, Humanities Core courses
- Social Sciences (9 hours)
- __PSYC 2003 General Psychology
- __Choose Social Sciences Core courses (6 hours)
- Health Science (3 hours)
- __HLSC 1002 Wellness Concepts
- __PEAC 1621 Fitness Concepts
- Ghes Requirements (43 hours)
- __HESC 1013 Introduction to Clothing Concepts
- __HESC 1023 Introduction to Apparel Production
- __HESC 1213 Fundamentals of Nutrition
- __HESC 1403 Life Span Development
- __HESC 1501 Orientation to HESC
- __HESC 2053 Introduction to Textile Science
- __HESC 2112/2111L Principles of Foods and lab
- __HESC 2203 Sport Nutrition
- __HESC 2413 Family Relations
- __HESC 2433 Child Development
- __HESC 3402/3401L Child Guidance and lab
- __HESC 3423 Adolescent Development
- __HESC 4453 Parenting and Family Dynamics
- __HESC 4753 Family Financial Management
- __IDES 4813 Human Factors in ID
- General Electives (37-43 hours)

124 Total Hours
Students majoring in human development and family sciences prepare for one of the fastest growing employment opportunities in the country. The human services area includes jobs that serve people from conception through the last stages of life. Students develop skills for working with individuals and families in governmental, private, and nonprofit organizations. Three concentrations are offered:

**Child Development (CDEV)**

This concentration is for students who desire in-depth knowledge of children and programs for children from birth to age 12. The focus on children covers issues from prenatal to early adolescence. Graduates may work as preschool teachers, day-care directors, specialists in the field of child life, and as child advocates.

**Birth through Kindergarten (BRKD)**

The knowledge and skills developed in this program will prepare students to work with children from birth through five years of age in various settings.

**Lifespan (LSPN)**

This area of study covers the care issues faced by families and individuals in contemporary society. The knowledge and skills developed in this program will prepare the student to work in areas such as aging, parent education, financial and consumer counseling, youth services, and other human service type careers.

**Requirements for a Major in Human Development and Family Sciences (HDFS)**

State minimum core and discipline specific general education requirements:

(Course work that meets state minimum core requirements is in **bold**.)

Communications (3-9 hours)
- Choose from **English Core** courses (6 hours)
  - COMM 1313 Public Speaking
- History and Government (3 hours)
  - Choose from **U.S. History and Government Core** courses
Mathematics (3 hours)
- Choose from **Mathematics Core** courses
Sciences (8 hours)
- Choose from **Science Core** courses
Fine Arts and Humanities (6 hours)
- Choose from **Fine Arts, Humanities Core** courses
Social Sciences (9 hours)
- **PSYC 2003** General Psychology
- **RSOC 2603** Rural Sociology or **SOCI 2013** General Sociology
- **HESC 2413** Family Relations

Additional Course Requirements for Child Development Concentration:

(CDEV Courses (57 hours)
- **HESC 1213** Fundamentals of Nutrition
- **HESC 1403** Orientation to HESC
- **HESC 2403** Infant and Toddler Development
- **HESC 2433** Child Development
- **HESC 2453** Analytical Approach to Research in HDFS I
- **HESC 2463** Analytical Approach to Research in HDFS II
- **HESC 3402/3401L** Child Guidance and lab
- **HESC 3423** Adolescent Development
- **HESC 4332/4332L** Curriculum and Assessment Birth to Three Years/Lab
- **HESC 4342/4342L** Curriculum and Assessment Three Years to Kindergarten/Lab
- **HESC 4423** Adult Development
- **HESC 4453** Parenting and Family Dynamics

Additional course requirements for Lifespan Concentration

(Lifespan Concentration Courses (49 hours)
- **HESC 1213** Fundamentals of Nutrition
- **HESC 1403** Orientation to HESC
- **HESC 2403** Infant and Toddler Development
- **HESC 2433** Child Development
- **HESC 2453** Analytical Approach to Research in HDFS I
- **HESC 2463** Analytical Approach to Research in HDFS II
- **HESC 3402/3401L** Child Guidance and lab
- **HESC 3423** Adolescent Development
- **HESC 4313** Building Family and Community Relationships
- **HESC 4332/4332L** Curriculum and Assessment Birth to Three Years and lab
- **HESC 4342/4342L** Curriculum and Assessment Three Years-Kindergarten and lab
- **HESC 4423** Adult Development
- **HESC 4433** Dynamic Family Interaction
- **HESC 4443** Gerontology
- **HESC 4483** Internship in HDFS
- **RSOC 2603** Rural Sociology
- **RSOC 4603** Environmental Sociology
- **HESC 4453** Parenting and Family Dynamics
- **HESC 4463** Administration and Leadership in the Helping Professions
- **HESC 4493** Public Policy Advocacy for Children and Families
- **HESC 4753** Family Financial Management
- **CIED 3023** Survey of Exceptionalities
- **CIED 3113** Emergent and Developmental Literacy
- **SCWK 3633** Problems of Child Welfare

**Child Development Electives (Choose 6 hours)**
- **HESC 1403** Orientation to HESC
- **HESC 2403** Infant and Toddler Development
- **HESC 2433** Child Development
- **HESC 2453** Analytical Approach to Research in HDFS I
- **HESC 2463** Analytical Approach to Research in HDFS II
- **HESC 3402/3401L** Child Guidance and lab
- **HESC 3423** Adolescent Development
- **HESC 4313** Building Family and Community Relationships
- **HESC 4332/4332L** Curriculum and Assessment Birth to Three Years and lab
- **HESC 4423** Adult Development
- **HESC 4433** Dynamic Family Interaction
- **HESC 4453** Parenting and Family Dynamics

**124 Total Hours**
Human Development and Family Sciences B.S.H.E.S. with Child Development Concentration
Eight-Semester Degree Program
Students wishing to follow the degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1
3 ENGL 1013 Composition I unless exempt
1 HESC 1501 Orientation to HESC
3 COMM 1313 Public Speaking
3 MATH Core elective
3 History Core Elective
3 Fine Arts Core Elective
16 Semester hours

Spring Semester Year 1
3 HESC 2413 Family Relations
3 PSYC 2003 General Psychology
3 ENGL 1023 Composition II unless exempt
4 Science Core Elective
3 General Elective
16 Semester hours

Fall Semester Year 2
3 HESC 1213 Fundamentals of Nutrition
3 HESC 2403 Infant & Toddler Development
3 Humanities Core Elective
3 HESC 2453 Analytical Approach to Research in HDFS I
4 Science University Core Elective
16 Semester hours

Spring Semester Year 2
3 HESC 2433 Child Development
1 HESC 1411L Observation of Children
3 COMM, ENGL, JOUR or Foreign Language
3 History Core Elective
6 General Electives
16 Semester hours

Fall Semester Year 3
3 HESC 3402/3401L Child Guidance and lab
3 CIED 3103 Children’s Literature
3 CIED 3113 Emergent & Developmental Literacy
3 SCWK 3633 Problems of Child Welfare
3 CDEV Elective
15 Semester hours

Spring Semester Year 3
3 HESC 3423 Adolescent Development
3 CIED 3023 Survey of Exceptionalities
3 CDEV Elective
7 General Electives
16 Semester hours

Fall Semester Year 4
3 HESC 4753 Family Financial Management
3 HESC 4423 Adult Development
3 HESC 4463 Administration and Leadership in the Helping Professions
3 HESC 4493 Public Policy Advocacy
3 General Electives
15 Semester hours

Spring Semester Year 4
3 HESC 4453 Parenting and Family Dynamics
11 General Electives
14 Semester hours
124 Total Hours
### Human Development and Family Sciences B.S.H.E.S. with Life Span Concentration

Eight-Semester Degree Program

Students wishing to follow the degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program.

**Fall Semester Year 1**
- 3 ENGL 1013 Composition I unless exempt
- 1 HESC 1501 Orientation to HESC
- 3 MATH Core Elective
- 3 HESC 1403 Lifespan Development
- 3 Fine Arts Core Elective
- 3 General Elective

**Spring Semester Year 1**
- 3 PSYC 2003 General Psychology
- 4 Science Core Elective
- 3 HESC 2413 Family Relations
- 3 ENGL 1023 Composition II unless exempt
- 3 General Elective

**Fall Semester Year 2**
- 3 HESC 1213 Fundamentals of Nutrition
- 3 History Core Elective
- 4 Science Core Elective
- 3 COMM 1313 Public Speaking
- 3 HESC 2453 Analytical Approach to Research in HDFS I

**Spring Semester Year 2**
- 3 HESC 2433 Child Development
- 3 HESC 2413 Family Relations
- 3 SOCI 2013 General Sociology or RSOC 2603 Rural Sociology
- 3 History Core Elective
- 3 HESC 2463 Analytical Approach to Research in HDFS II

**Fall Semester Year 3**
- 3 HESC 3443 Families in Crisis
- 3-4 General Elective
- 3 LSPN Elective
- 6-7 General Electives

**Spring Semester Year 3**
- 3 SCWK 3163 On Death and Dying
- 3 General Elective
- 3 LSPN Elective
- 6 General Electives

**Fall Semester Year 4**
- 3 HESC 4493 Public Policy Advocacy
- 3 HESC 4753 Family Financial Management
- 3 HESC 4453 Parenting and Family Dynamics
- 3 HESC 4423 Adult Development
- 3 HESC 4463 Administration and Leadership in the Helping Professions

**Spring Semester Year 4**
- 3 HESC 4433 Dynamic Family Interaction
- 3 HESC 4443 Gerontology
- 3 CNED 3053 The Helping Relationship
- 6-7 General Electives

**Minor in Human Development and Family Sciences (HDFS-M)**

18 hours to include the following:
- __HESC 1403 Life Span Development__
- __HESC 2413 Family Relations__
- Choose 12 hours from:
  - __HESC 2403 Infant and Toddler Development__
  - __HESC 2433 Child Development__
  - __HESC 2443 The Hospitalized Child__
  - __HESC 3402/3401L Child Guidance and lab__
  - __HESC 3423 Adolescent Development__
  - __HESC 3443 Family in Crisis__
  - __HESC 4423 Adult Development__
  - __HESC 4443 Gerontology__
  - __HESC 4453 Parent/Family Dynamics__
  - __HESC 4463 Administration and Leadership in the Helping Professions__
  - __HESC 4493 Public Policy Advocacy for Children and Families__
  - __HESC 4753 Family Financial Management__
  - __RSOC 2603 Rural Sociology__
  - __RSOC 4603 Environmental Sociology__
Fay Jones School of Architecture

Office of the Dean of the School
112 W. Center Street, Suite 700, 479-575-4945
Dean
Jeff Shannon
Associate Dean
Ethel Goodstein-Murphree
Advising Center
479-575-2399
World Wide Web
http://architecture.uark.edu
E-mail
fjsoa@uark.edu

MISSION AND OBJECTIVES

The Fay Jones School of Architecture at the University of Arkansas houses professional design programs of architecture, landscape architecture and interior design together with liberal studies programs. The school’s programs in architecture and landscape architecture include traditional five-year professional degree programs and four-year pre-professional degrees, combining studio design education with innovative teaching in history, theory, technology and urban design. The four-year interior design program combines a foundation of professional courses with studies in art, architecture and business. A broad range of course offerings equips graduates with the knowledge required for the challenges of a changing world. Design instruction occurs in a carefully planned studio sequence, providing educational experiences appropriate for students who wish to pursue both traditional and non-traditional forms of professional practice. Fundamental principles and techniques of critical analysis are stressed, and the curricula strives to empower students by developing skill, knowledge, and a deep sense of responsibility to the environment and to the cultures they will serve. Design studio projects survey issues and opportunities in built and natural settings, as well as addressing complex social, physical, and cultural relations that constitute the human-made environment. In summary, the school prepares its students with critical frameworks for design thinking that equip them to assume leadership roles in the profession and in their communities.

FACILITIES AND RESOURCES

The Fay Jones School of Architecture administrative offices and the department of architecture are located on the seventh floor of the E.J. Ball Building on 112 W. Center Street near the Fayetteville square while Vol Walker Hall undergoes an extensive remodel and state-of-the-art addition. The architecture design studios are located temporarily in the former museum space. The landscape architecture department remains in Memorial Hall, and the interior design program remains in the Agricultural Annex until all three disciplines join together in the newly remodeled Vol Walker Hall. The university’s location in Northwest Arkansas, an area experiencing rapid growth and change, affords unusual opportunity to study the impact of urbanization in a traditionally agricultural setting. The school includes as part of its programs field trips, guest lectures, research assignments, and other learning opportunities oriented toward broadening the educational prospective of its students. Classes also are offered in a variety of settings away from the campus. Options include a semester in the Rome Study Center for Architecture and the Humanities near the Piazza Navona in Rome, Italy; the summer Study Abroad Program Studio in a designated Latin or Central American country; and European Field Studies in Italy, France, England and Scotland.

Design Studio

The design studio sequence is the core of each discipline within the school. Studio projects are complemented by topical lectures that inform the design process. Knowledge from those lectures is expected to inform work produced in design studios. This method is intended to develop and nurture the intellectual and creative skills of students and to allow them to approach problem solving in a disciplined, logical, and analytical manner. Design professionals must be able to conceptualize responses to project programs, to communicate with clients, to present ideas verbally, and to demonstrate ideas graphically. They also need to maintain technical knowledge of building or ecology and construction technology, must be able to negotiate with contractors and owners to administrate construction, and should be prepared to market their services. In other words, each designer fulfills a multitude of roles, whether practicing alone or as a team member in a large multidisciplined organization. The design studio consists of a series of projects of increasing complexity; all requiring three-dimensional problem solving, conceptualization, and final presentation to the studio critic, other faculty members, and fellow students. The amount of material to be covered, the fast pace of assignments, and the presentation of work for faculty and other students combine to produce a highly charged studio atmosphere.

Library Resources

The C. Murray Smart Multimedia Center, temporarily located in the E.J. Ball building and the Fieldhouse, is staffed by two full-time employees: a computer support specialist and a visual resources curator. It contains an online, fully searchable digital image database with more than 50,000 images relating to architecture, architectural history, interior design, landscape and urban design. This resource, along with a collection of approximately 700 video programs, is available to faculty and students of the school. Special events and visiting lectures are routinely video recorded and made available online to the campus community. The center provides personal media training for faculty using Blackboard, other online teaching aids and distance learning; assistance is also available for students using digital imaging technology, the use of scanners, digital cameras and other digital media.

Digital Drawing and Fabrication Resources

The school maintains two fabrication labs, the DesignSHOP for use by all students and the DFAB Lab, a research facility located off campus. The DesignSHOP houses traditional and digital fabrication equipment including a three-axis computer...
numerically controlled (CNC) router, three laser cutters, vacuum-form, and a three-dimensional printer that allow students and faculty to transform digital models into physical 3D components and models. Students work with wood, fiber board, metals, plastics, cardboard and paper products. They are encouraged to work with both conventional and CNC machines to develop prototypes, casting molds, furniture, models, and other products. The DFAB Lab houses a 5-axis CNC router and plasma cutter, a three-dimensional printer, digital paper cutter, metal press, and vacuum-form table. The labs are staffed during the day and evening hours by students and faculty assistants; hours vary by semester. The school also supports three computer labs for 2D digital scanning and printing. The labs house flatbed and roll scanners, large-format plotters, color and B&W laser printers. There is a computer technology specialist and a part-time assistant who run and maintain these 24-7 labs open to all students in the school. Students are charged a minimal fee for printing. All ink, toner and several types of paper are provided to give students opportunity to craft hybrid representations by merging hand and digital drawing techniques. Finally, the school offers lectures, workshops and access to design software (most free of charge) that supports individual work as well as collaborative projects between architects, landscape architects, interior designers, artists, engineers, mathematicians and fabricators.

The Materials Shop

The Materials Shop supports construction projects ranging from light fixtures and furniture to three-dimensional models. The facility is staffed by one full-time technician and is available to students and faculty for design, coursework, and research projects. The workshop houses multiple table saws, band-saws, chop saw, scroll saw, drill presses, jointer, planer, lathe, belt sanders, metal break and many hand tools.

Garvan Woodland Gardens

Located on Lake Hamilton in Hot Springs, Arkansas, Garvan Woodland Gardens is an integral unit of the school. The land and endowment were the result of a bequest to the department of landscape architecture in 1985. This 210-acre woodland habitat features a variety of garden settings and unique architectural structures designed and developed by world-renowned specialists in botanical gardens, landscape architecture and architecture. An internship program offers opportunities for summer study and employment.

University of Arkansas Community Design Center

Since 1995 the University of Arkansas Community Design Center (UACDC) has provided award-winning, innovative planning to communities and organizations throughout Arkansas. A nationally recognized leader in urban design, sustainable development, and education UACDC design solutions advance triple-bottom line thinking: simultaneously solving for economic, ecological, and social criteria. The center's work is multi-disciplinary as it addresses new challenges in affordable housing, context sensitive highway design, low impact development, transit-oriented development, big box urbanism, watershed urbanism, and agricultural urbanism. In the tradition of a teaching office, students collaborate with the center's professional design staff and allied consultants while authoring their own proposals. The goal is to prepare designers for leadership in "wicked problem solving" that leads to intelligent development of the built environment.

DEGREES OFFERED

The Fay Jones School of Architecture offers five-year professional programs in architecture and landscape architecture and a four-year professional program in interior design. Each program culminates in a professional degree, the Bachelor of Architecture (B.Arch.), Bachelor of Landscape Architecture (B.L.A.) or Bachelor of Interior Design (B.I.D.).

The Bachelor of Architecture prepares students who aspire to registration and licensure to practice architecture. Architects do more than design and plan buildings. The architect’s unique talents create environments that serve the psychological, economic, and spiritual needs of their clients and communities. Architects help cities and small communities to become safe, healthy, and wholesome places to live. Perhaps most important, architects create, preserve, and inspire beauty in the built environment.

The Bachelor of Landscape Architecture is an accredited five-year first professional degree that prepares students to practice landscape architecture as a licensed professional. The discipline of landscape architecture balances human requirements with landscape concerns. Landscape architects design, plan, and manage the land through understanding the interrelationships among the spirit of place, local ecology, individuals, and communities. They create outdoor spaces and rebuild ecological systems that meet societal needs, protect or enhance the natural environment, and respond to cultural conditions. Design and planning projects span the breadth of the profession to include urban design and town planning, public parks, land conservation, stormwater management systems, ecological rehabilitation, historic landscape preservation, private gardens, housing developments, institutional and business campuses, and golf courses.

The Bachelor of Interior Design curriculum combines a foundation of professional courses enhanced by classes in business, art, and architecture. The mission of the Interior Design program is to offer a strong professional design education grounded in critical thinking, multi-disciplinary collaborations and civic engagement. The program strives to provide graduates with the professional tools, hands-on training, service opportunities, and practical experience leading to academic, personal, and professional success. Graduates may focus on contract, residential, and institutional interior design and a variety specializations such as historic preservation, lighting design, exhibition design, and contract and residential sales.

The School also offers two four-year programs, culminating in non-accredited degrees: the Bachelor of Science in Architectural Studies and the Bachelor of Science in Landscape Architectural Studies. These degrees serve students who, although interested in the design disciplines, do not aspire to professional practice. The four-year programs are particularly well suited for students who seek careers in allied disciplines, including historic preservation, environmental law, and history of architecture, as well as for students looking forward to graduate education in architecture, landscape architecture and the allied disciplines.

Minors

Students in architecture, landscape architecture and interior design may pursue an academic minor in approved degree programs of other colleges on campus, providing they meet the specific requirements for that minor. The School also offers a minor in Interior Design appropriate for other majors in the Fay Jones School of Architecture and a minor in Planting Design appropriate for other majors within the school and outside of the Fay Jones School of Architecture.

SCHOOL ADMISSION REQUIREMENTS

Department of Architecture Admissions

The department of architecture maintains three distinct tracks of study for entering freshmen to accommodate all students interested in pursuing a degree in architecture. The three tracks of study are designed to foster learning and to build strong foundations for students entering the program with different skill levels and high school backgrounds. Students accepted to the University of Arkansas with the intention to participate in the B.Arch. or B.S. programs in the department of architecture will be classified as “Regular Admissions” (fall/spring studio students or spring/summer studio students) or “Pre-Architecture Admissions.” Please contact the school’s advising center for a complete description of admission requirements.

Fall/Spring Studio

Students must meet all of the following requirements:
- 25 ACT or better
- 3.5 GPA in high school
- College preparatory curriculum to include physics and an upper level math (Pre-Calculus or higher)

Space in the studio is limited to 50 students with priority given to first year students who are admitted to the University of Arkansas and indicate architecture as their intended degree program by November 15. Students are reviewed at the end of the fall semester and may continue the program if they meet the following criteria:
- “C” or better in ARCH 1015, Architectural Design I
• “C” or better in PHYS 1044 Physics for Architects I or an approved equivalent
• “C” or better in ARCH 1212, Design Thinking I: Foundations in Technology
• Maintain a 2.0 GPA

Students who do not meet these criteria will receive a letter and be advised accordingly.

Spring/Summer Studio

These students meet the University of Arkansas minimum requirements for admission but do not meet the above criteria for fall/spring studio. These students may continue into ARCH 1015, Architectural Design I in the spring if they meet the following criteria:
• “C” or better in PHYS 1044 Physics for Architects I or an approved equivalent
• Maintain a 2.0 GPA

Students who do not meet these criteria will be delayed until they satisfy the admissions criteria for the Department of Architecture. Students will be reviewed at the end of the spring semester and will not be allowed to continue in the program if they do not meet the following criteria:
• “C” or better in ARCH 1015, Architectural Design I
• “C” or better in ARCH 1222, Design Thinking II: Foundations in History
• Maintain a 2.0 GPA

Pre-Architecture Admissions: Students who are accepted to the University of Arkansas on a provisional basis cannot begin the fall/spring or spring/summer sequence until the provisions of their admission are met. These are students who have GPAs or ACT scores below the University of Arkansas minimum or have deficiencies in one or more areas (typically math or English). The Pre-Architecture track of study will, in most cases, add one year to their education. Students follow a specified curriculum based on individual needs and are allowed to enter the design sequence only when their provisions are met and a cumulative GPA of 2.00 is achieved. Please see the school’s advising center for additional information regarding the review process, grade criteria, and continuance in the program.

Architecture Department Transfer Students

Students who wish to be admitted to the Fay Jones School of Architecture must meet the following requirements:
• Completion of first semester university core courses to include an approved general physics course, an approved mathematics course and general education core requirements with a minimum of 12 hours credit and a GPA of 2.00. For information about the state minimum core, see University Core Requirements on page 41.
• To enter Design I in the fall, transfer students and international students must meet all freshmen admission requirements.
• To enter Design I in the spring, students must successfully pass Physics for Architects I (or another approved upper level physics course) with a minimum of C or better, complete an approved math course and maintain a 2.00 GPA overall.
• Students admitted to the university with a completed two-year associate of arts or associate of science degree from an Arkansas state-supported two-year or four-year college or university, as stated in ACT 182, will have general education (core) requirements waived. All students must complete any lower division discipline specific courses required for the major, as well as all courses required to comply with the conditions of accreditation.

In addition, international transfer students must present a TOEFL minimum score of 550 to become eligible for acceptance into the department of architecture. Lack of knowledge or misinterpretation of policies and/or regulations on the part of individual students will not be considered a valid reason for failure to fulfill requirements.

NOTE: All students must complete or receive transfer credit for either PHYS 1044 Physics for Architects I or PHYS 2013/2011I. College Physics I, MATH 1213 Plane Trigonometry, MATH 2033 Mathematical Thought, MATH 2043 Survey of Calculus or MATH 2053 Finite Mathematics and all other first year university core curriculum courses prior to entry into ARCH 2016 Architectural Design III and ARCH 2113 Architectural Structures I.

Ultimate responsibility for completion of entrance requirements rests with each student.

Admission to the Professional Program in the Department of Architecture

The department of architecture offers prospective students the opportunity to prepare for architectural practice or related endeavors. With this opportunity comes a responsibility for demonstrating a commitment to personal growth and success in the professional program.

Students are admitted to the first year of the architectural curriculum based on criteria established by the university and by the school. They are evaluated by grades in course work and by grades each semester for performance and progress in the design studio sequence.

At the completion of the third year of the department of architecture curriculum, including completion of the 35 semester-credit hours of the university’s general education core requirement, students will be evaluated for admission to the professional program on the basis of academic performance in the university core and the architecture curriculum comprising the sub-disciplines of History/Theory, Technology, and Design. Admission requires a majority vote of a departmental admissions committee. Students are encouraged to take maximum advantage of the opportunities that professional and free electives provide for pre-professional development, cultivation of specialization in and related to the profession, and/or preparation for graduate education. Students admitted to the professional program will continue in the established studio curriculum sequence and are to complete the final two years of design studio at the school. At the time of admission, however, the faculty may recommend or approve an alternative course of study that will allow students to pursue an area of concentration other than design in accordance with the letter and spirit of the curricula. Multidisciplinary alternatives may be developed using electives and coursework from business, engineering and other areas applicable to the practice of architecture.

Interior Design Program Admissions

All students (including freshmen, international, and transfer students) admitted to the University of Arkansas are eligible for participation in the interior design program. Space in the studio is limited to 50 students, with priority given to first year students who are admitted and indicate interior design on their admissions application by February 15th. All candidates for the program will be reviewed at that time, with priority given to those with the highest grade-point averages and/or ACT/SAT combination. Students who require developmental work because of low ACT or SAT scores or University-administered math placement examinations or who require courses to remove deficiencies may not register for more than 12 credit hours. Upon completion of required developmental work, students may enroll in additional credit hours. Contact the school’s advising center for more information.

Students who wish to transfer from another CIDA accredited Interior Design program must submit a creative portfolio and other supporting documents for faculty review prior to admission to the program. Review of the portfolio will determine admission to the program and appropriate placement based on demonstrated skills and earned college credit. Students may be required to wait for the appropriate studio sequence. Students admitted to the university with a completed two-year associate of arts or associate of science degree from an Arkansas state-supported two-year or four-year college or university will receive credit for general education (core) requirements in accordance with Legislative ACT 182. All students also must complete any lower division discipline specific courses required for the major as well as all courses required to comply with the conditions of accreditation.

Transferring from Accredited Schools of Architecture: Students transferring from an accredited professional program in architecture must have their architecture courses reviewed for acceptance and for determination of studio year placement by submitting materials for review. Please contact the school’s advising center for a specific list of required materials.
Admission to the Professional Program
for Interior Design

The interior design program offers prospective students the opportunity to prepare for professional practice or related endeavors. With this opportunity comes a responsibility for demonstrating a commitment to personal growth and success in the professional program.

Students are admitted to the first year of the interior design curriculum based on criteria established by the university and by the program. Students admitted to the program are evaluated each semester by grades in lecture courses and by grades for performance and progress in the design studio sequence.

At the completion of the first year of the interior design curriculum, students will be evaluated for admission into the professional program on the basis of academic performance in the university interior design curriculum. The review process will include evaluation of performance in Textiles, Studio 1, and Studio 2. Admission is based on available desks and requires a majority vote of a departmental admissions committee. Students admitted to the professional program will continue in the established studio curriculum sequence and are to complete the final three years of design studio at the school. Students with less than a 2.5 GPA in IDES courses will not be admitted to the professional program. Students who are not admitted are encouraged to consider alternative programs in the school and the university.

Students are encouraged to maximize opportunities that professional and free electives provide for pre-professional development, specialization in areas related to the profession, and/or preparation for graduate education.

Department of Landscape Architecture Admissions

All students (including freshmen, international, and transfer students) admitted to the University of Arkansas are eligible for participation in the landscape architecture program in the school. Space in the studio is limited with priority given to first year students who are admitted and indicate landscape architecture or landscape architectural studies on their admissions application by November 15th. Students who require developmental work because of low ACT or SAT scores or university-administered math placement examinations or who require courses to remove deficiencies may not register for courses carrying LARC departmental designations. Upon completion of required developmental work and maintaining a grade-point average of 2.00 or more on at least 12 credit hours, students may enroll in landscape architecture (LARC) courses. Please refer to “Admission to the Professional Program in Landscape Architecture” for required academic levels for entering the program.

Admission to the Professional Program in Landscape Architecture

The department of landscape architecture offers a professional education grounded in liberal arts studies, which prepares students for landscape architecture practice in the private, public, and not-for-profit sectors. Successful completion of the program requires commitment to personal growth and excellence. Students are admitted to the first year of the landscape architecture program based upon the established criteria by the University of Arkansas. Academic and professional performance is evaluated by grades in the course work, design studios, and construction labs. After completing all program requirements in the first two years in the program, students submit a portfolio of work at the end of the spring semester for application to continue in the professional program. Applicants who have a grade-point average below a 2.5 will not be allowed to continue in the program. Contact the department head for specific portfolio submission requirements and schedule of deadlines. All candidates will be notified of their acceptance or rejection in writing, normally by the first of August.

Students will be evaluated on general academic performance and in the landscape architecture curriculum as well as professional conduct. All department faculty serve on the admissions committee. Any appeal to the committee’s decision may be made by submitting a letter to the department head one week before the first week of the subsequent fall semester. The appeal will be presented to the entire faculty for consideration and will require the candidate to present their case in person.

Students who fail to gain admission to the Bachelor of Landscape Architecture degree program will be referred to the department head and the school’s academic advisor for appeal procedures and alternative degree programs in the school and the university.

SCHOOL SCHOLARSHIPS

More than 70 awards and scholarships, including both merit and need-based scholarships, are available to students in the Fay Jones School of Architecture. Most are awarded annually on the basis of recommendations made by the scholarship committee of the school. Only work accomplished since entering the school will be considered in determining merit awards based on grade-point averages.

Applications for scholarships are available for prospective and currently enrolled students at http://architecture.uark.edu/126.php

STUDENT ORGANIZATIONS

American Institute of Architecture Students

The American Institute of Architecture Students (AIAS) is a national organization whose purpose is “to organize architecture students and combine their efforts to advance the science and art of architecture, to promote excellence in architectural education, training and practice, and to foster an appreciation of architecture and related disciplines among all persons.” All students in the school’s architecture program are eligible for membership.

American Society of Landscape Architects, Student Chapter

The purpose of the student chapter of the American Society of Landscape Architects is to bring together the landscape architecture students to combine their interests and efforts, to extend their knowledge of the profession of landscape architecture, and to help advance the profession while preparing for a professional career. All students in the school’s landscape architecture program are eligible for membership.

Interior Design Organization

The Interior Design Organization (IDO) is dedicated to representing the entire profession and encouraging the highest possible standards for the practice of interior design. Its purpose is to encourage interaction with professionals in interior design and allied professions and to develop leadership qualities.

Tau Sigma Delta Honor Society

The Alpha Eta Chapter of Tau Sigma Delta is the only national collegiate honor society recognized in the fields of architecture, landscape architecture, interior design and allied arts. All students in the school are eligible for membership.

Elections to membership are made by the existing membership, subject to approval by the faculty, from the top 20 percent of each class of fourth-year and fifth-year students maintaining a minimum 3.00 cumulative grade-point average. In addition, leadership, character, and promise of professional merit are considered in making selections.

Sigma Lambda Alpha

Sigma Lambda Alpha, founded and chartered by the Council of Educators in Landscape Architecture (CELA), is an international honor society that encourages, recognizes and rewards academic excellence in preparation for the profession of landscape architecture. Any landscape architecture junior or senior with an average of 3.2 or higher is eligible for membership.
SCHOOL ACADEMIC REGULATIONS

Plus/Minus Grading System
The Fay Jones School of Architecture utilizes a plus/minus grading system that assigns numerical values to 12 different grades. These values are used for architecture or landscape architecture courses when grade-point averages are calculated. The 12-step grading system with assigned values is as follows:

A 4.00  B 3.00  C 2.00  D 1.00
A− 3.67  B− 2.67  C− 1.67  D− 0.67
B+ 3.33  C+ 2.33  D+ 1.33  F 0.00

Academic Policies – Department of Architecture
The following academic policies, beyond the requirements of the university, are applicable to all students in the Department of Architecture.

1. Any student receiving a grade of “D (+/-)” in a pre-professional program studio course is subject to a comprehensive review of their semester’s work by the Design Review Committee. The committee may require that the student retake the studio, prior to advancing to the next studio in sequence, in order to demonstrate competence for the required materials as evidenced by achieving a grade of “C” (2.00) or better. A student receiving an “F” in design studio must repeat that studio before progressing.

2. Each student’s progress through the Design Studio sequence is monitored and governed by the faculty and subject to a design review process.

3. Admission to the Professional Degree Program in the Department of Architecture requires a minimum 2.00 grade-point average in the University Core and each of the sub-disciplines of Architecture: History/Theory, Technology and Design.

4. Enrollment in Architectural Design VII (ARCH 4016) is contingent upon admission to the professional program in architecture as described above.

5. Successful completion of the upper level studios of the professional degree program (ARCH 4016, ARCH 4026, ARCH 5016, ARCH 5026) requires demonstration of competence as evidenced by achieving a grade of “C” (2.00) or better in those courses. Failure to achieve this minimum standard will require retaking the studio.

6. Any student receiving an “I” in a design studio must complete all work necessary to receive a grade prior to the first day of the next studio in the student’s prescribed sequence to be eligible to enroll in that studio.

7. Prior to graduation, a student must present a 2.00 cumulative grade-point average at this institution in all work attempted including the University Core, electives, and in each of the sub-disciplines of Architecture: History/Theory, Technology and Design.

Design Review (Grade Appeal) Procedure – Department of Architecture

The Design Review Process
Design Review is a process initiated by a faculty member, the Department Head, or a student in order that (1) a faculty member may review a student’s design work within a studio course, or (2) a student may appeal grades and/or seek resolution of conflicts with studio faculty in which it is believed that questions of fairness and equity have been raised by the application of the published grading policy of the faculty member. Faculty reviews are predicated upon, but are not limited to, the review of student work that has received a “D” grade or lower.

The Department Head will appoint a Design Review (Appeals) Committee at the beginning of each academic year. The Committee shall be composed of three (3) members of the permanent faculty. Additional or alternate members of the Committee may be appointed at the discretion of the Department Head or the Associate Dean.

Grade appeals initiated by students will occur during the week prior to the start of classes in the subsequent semester. Grade appeals may be filed, through petition to the Office of the Associate Dean, as soon as the student receives his or her final grade, but no later than the first day of the subsequent semester, (Monday of the week prior to the start of classes). In instances when the appeal concerns a change of an incomplete grade, petition for review should be made as soon as possible after the award of the final grade, and the review will be scheduled at the discretion of the Associate Dean.

Protocol for the Design Review (Appeal) Process
1. Students are encouraged to meet with the faculty member(s) who has awarded the contested grade prior to filing a grade appeal. The student may request that his/her faculty advisor, a member of the professional advising staff, or the Associate Dean facilitate this meeting.

2. When a Design Review (Appeal) has been scheduled, the student shall exhibit, at the place and time specified by the Associate Dean’s office, ALL work assigned and attempted for the studio in the semester under review. Faculty are required to provide the Design Committee with the course syllabus, grading policy, semester assignments, mid-term course assessment, and a written evaluation (a one-page rationale) of the full semester’s work at least 48-hours in advance of the Design Review.

3. The Design Review (Appeal) will consist of separate and independent meetings of the Design Review (Appeal) Committee with the student and the faculty member(s). Following these meetings, the Committee will convene to evaluate the merits of the review (appeal). The Committee is expected to serve as both objective reviewers of the work and as advisers to the student.

4. The Design Review (Appeal) committee will keep minutes of its deliberations. All recommendations from the Committee shall have written explanations and/or justifications, which will be provided to the student, the faculty member, and the Associate Dean, and made part of the student's academic file. The Associate Dean will be responsible for communicating the results of a Review (Appeal) to the student.

The outcome of the Design Review
1. A recommendation to the faculty member regarding the grade appeal of the student. Action upon that recommendation is undertaken solely at the discretion of the faculty member. No faculty member is compelled to change a grade in response to the recommendation of the Design Review Committee.

2. A requirement for the student to repeat the design studio course and any co-requisite.

3. A recommendation for enrollment in the subsequent studio course, while advising the student of the need to achieve and maintain a cumulative 2.00 (in the studio sequence) for admission to the professional program.

4. An academic advising plan to guide the student toward successful completion of his/her degree requirements or the pursuit of an alternate career path. All efforts shall be made to achieve clarity and reconciliation, so that the student is able to move forward positively in his/her academic career.

Grade Appeals – Department of Landscape Architecture
Students in the Department of Landscape Architecture may appeal grades in the design studios as well as other professional courses in which it is believed that there are questions of fairness or equity in the application of the published grading policy of the faculty member. Appeals must be made in writing to the department head one week before the first week of the subsequent semester. The appeal will be presented to the entire landscape architecture faculty for consideration and may require the students to present their case in person. Students are encouraged to meet with the faculty member who has awarded the contested grade prior to filing a grade appeal. The student may request that a member of the professional advising staff, department head or associate dean facilitate this motion.

1. A recommendation to the faculty member regarding the grade appeal of the student.

2. A requirement for the student to repeat the design studio course and any co-requisite.

3. A recommendation for enrollment in the subsequent studio course, while advising the student of the need to achieve and maintain a cumulative 2.5 grade-point average for admission to the professional program.

Academic Policies – Interior Design Program
The following academic policies, beyond the requirements of the university, are...
applicable to all students in the Interior Design Program.

1. Successful completion of all IDES coursework requires demonstration of competence as evidenced by achieving a grade of “C” (+/-) or better in those courses. Failure to achieve this minimum standard will require retaking the studio or lecture course.
2. Each student’s progress through the design studio sequence is monitored and governed by the faculty and subject to a Design Review process.
3. Any student receiving an “I” in a design studio must complete all work necessary to receive a grade prior to the first day of the next studio in the student’s prescribed sequence to be eligible to enroll in that studio.
4. Prior to graduation, a student must present a 2.00 cumulative grade-point average at this institution in all work attempted including the university state minimum core.

Design Review Procedure – Interior Design Program

Design Review is a process initiated by a faculty member, the Program Head, or a student in order that (1) a faculty member may review a student’s design work within a studio course or (2) a student may appeal grades and/or seek resolution of conflicts with studio faculty in which it is believed that questions of fairness and equity have been raised by the application of the published grading policy of the faculty.

The Program Head will appoint a Design Review (Appeals) Committee, composed of three (3) members of the permanent or adjunct faculty. Additional or alternate members of the Committee may be appointed at the discretion of the Program Head or the Associate Dean. Faculty reviews are predicated upon, but are not limited to, the review of student work that has received a “D” grade or lower.

Grade appeals initiated by students will occur during the week prior to the start of class in the subsequent semester. Petitions for this review must be made through the Office of the Associate Dean prior to the scheduled meeting of the Design Review Committee. Grade appeals may be filed as soon as the student receives his or her final grade, but no later than the first day of the subsequent semester, (Monday of the week prior to the start of classes). In instances when the appeal concerns a change of an incomplete grade, petition for review should be made as soon as possible after the award of the final grade, and the review will be scheduled at the discretion of the Associate Dean.

Protocol for the Design Review (Appeal) Process

1. Students are encouraged to meet with the faculty member(s) who has awarded the contested grade prior to filing a grade appeal. The student may request that his/her faculty advisor, a member of the professional advising staff, or the Associate Dean facilitate this meeting.
2. When a Design Review (Appeal) has been scheduled, the student shall exhibit, at the place and time specified by the Associate Dean’s office, ALL work assigned and attempted for the studio in the semester under review. Faculty are required to provide the Design Review Committee with the course syllabus, grading policy, semester assignments, mid-term course assessment, and a written evaluation (a one-page rationale) of the full semester’s work at least 48-hours in advance of the Design Review.
3. The Design Review (Appeal) will consist of separate and independent meetings of the Design Review (Appeal) Committee with the student and the faculty member(s). Following these meetings, the Committee will convene to evaluate the merits of the review (appeal). The Committee is expected to serve as both objective reviewers of the work and as advisers to the student.
4. The Design Review (Appeal) committee will keep minutes of its deliberations. All recommendations from the Committee shall have written explanations and/or justifications, which will be provided to the student, the faculty member, and the Associate Dean, and made part of the student’s academic file. The Associate Dean will be responsible for communicating the results of a Review (Appeal) to the student.

The outcome of the Design Review process may include:
1. A recommendation to the faculty member regarding the grade appeal of the student. Action upon that recommendation is undertaken solely at the discretion of the faculty member. No faculty member is compelled to change a grade in response to the recommendation of the Design Review Committee.
2. A requirement for the student to repeat the design studio course or lecture course.
3. A recommendation for enrollment in the subsequent studio course, while advising the student of the need to achieve and maintain a cumulative 2.00 (in the studio sequence) to progress in the program.
4. An academic advising plan to guide the student toward successful completion of his/her degree requirements or the pursuit of an alternate career path. All efforts shall be made to achieve clarity and reconciliation, so that the student is able to move forward positively in his/her academic career.

Off-Campus Study Requirement

Each student in the professional program in architecture is required to complete an approved off-campus study experience focusing upon complex urban relationships and fostering cultural diversity. Approved programs in the Department of Architecture include a semester in Rome and a summer design studio in Latin or Central America.

Each student in the professional program in landscape architecture is required to participate in a summer study in Europe. This program exposes students to urban design and planning approaches. The program takes place after the student’s third year of design studios.

A special international programs fee supports the school’s international programs. These fees are assessed to all students participating in the professional degrees in architecture and landscape architecture designated in the “Fees and Cost Estimates” section of this catalog. The international program fees offset costs of maintaining off-campus programs that are not a part of the school’s university-funded budget, as well as enhancing student-centered activities. Students are assessed the international fee each semester (not to exceed eight semesters) up until the semester they study abroad. At that time, they will be assessed for any remaining semesters plus any additional programs costs not covered by the international study fees. The fee is assessed for each study abroad program and is not regulated by the catalog year of the students’ first enrollment in the Fay Jones School of Architecture. The fees are subject to change and are non-refundable under any circumstances including withdrawal from the respective professional programs. For further information, see notes on related program fees under “Fees and Cost Estimates” for the university.

To promote a broader perspective of design, students enrolled in the Interior Design program are required to participate in both overnight and day field trips for studio courses. Students are also encouraged to participate in faculty-approved study abroad opportunities offered by the Fay Jones School of Architecture or other approved institutions.

A special program fee supports the Interior Design program’s required field trips. These fees are assessed to all students participating in the interior design program. They are designated in the “Fees and Cost Estimates” section of this catalog. The fees offset costs of travel to off-campus sites that are not a part of the school’s university-funded budget, as well as enhancing student-centered activities. Students are assessed the fee each semester. The fees are non-refundable under any circumstances including withdrawal from the respective professional program. For further information, see notes on related program fees under “Fees and Cost Estimates” for the university.

Ownership of Work

All original work submitted for credit, including design studio projects, becomes the property of the Fay Jones School of Architecture. Students are required to maintain portfolios documenting all academic and design studio work. Digital copies (compact discs) of all work completed in a studio must be submitted to the studio year coordinator in order to receive a grade for the studio.

School Computer Policy

All students enrolled in the school are required to supply, in the second year, a
The YOU of A

Fay Jones School of Architecture

lative gpa, depending on their year level, will receive a one-semester probation period program at this time.

Core and/or Professional Core Honors courses) will be dismissed from the honors degree. Students found not to have successfully completed the honors core course(s) needed to satisfy their Honors degree requirements (i.e., sufficient credits in University Core and/or Professional Core Honors courses) will be dismissed from the honors program at this time.

From the second semester of the third year onward, Architecture Honors Scholars are required to maintain a minimum cumulative GPA of 3.33 to remain in the program.

Transfer students may be invited to join the Architecture Honors Program as Distinguished Scholars or as Departmental Scholars if they maintain a cumulative GPA of 3.5 or higher in courses completed at the University of Arkansas by the end of the first semester of their third year of study, and a 3.33 GPA thereafter.

Every semester, the school's advising center will apprise the Architecture Honors Program Committee of students who have achieved this level of excellence and are eligible to join the Architecture Honors Program. Invitations are extended to students by the end of the semester in which the candidacy is advanced.

At the end of the first semester of the third year, students will sign a form, confirming their intention to complete the remaining requirements for their honors degree. Students found not to have successfully completed the honors core course(s) needed to satisfy their Honors degree requirements (i.e., sufficient credits in University Core and/or Professional Core Honors courses) will be dismissed from the honors program at this time.

Architecture Honors Program students who fail to maintain a 3.5 or 3.33 cumulative gpa, depending on their year level, will receive a one-semester probation period prior to dismissal from the program.

The Department of Architecture Honors Program

The mission of the Department of Architecture at the University of Arkansas is rooted in the best traditions of architectural education: responsibility and service to the societies and cultures to which we are inextricably connected, and the nurturing of the individual curiosity and capabilities of our students. To achieve the highest potential of these goals, the department faculty has developed the Department of Architecture Honors Program and participates in the programs of the University of Arkansas Honors College. The Architecture Honors Program provides opportunities for students of superior academic and creative ability to enhance and enrich their professional and liberal education. Students in the Architecture Honors Program are eligible to graduate cum laude, magna cum laude, and summa cum laude. All other students who attain a cumulative GPA of 3.5 or higher will be eligible to graduate with distinction, a classification separate from the cum laude awards.

The Architecture Honors Program offers two components: The Distinguished Scholars Program, which requires 44 credit hours of honors designated courses, and the Departmental Scholars Program, requiring 24 credit hours of honors designated courses for the Bachelor of Architecture degree. Specific requirements for each program are detailed below. Eligible students in both the five-year Bachelor of Architecture curriculum and the four-year Bachelor of Science in Architectural Studies program are welcome to join the honors program.

Honors Independent Study Policy

Honors students may take as many regular or honors independent study credits as they deem desirable, but only one three-credit honors independent study course (ARCH 303VH, Honors Special Projects) may be substituted for an Honors Professional Elective. Furthermore, the substitution will be permitted only if all of the following conditions are satisfied:

1. That the Honors independent study not be taken concurrently with thesis credit (ARCH 5016H or ARCH 5026H).
2. That the honors independent study not be taught by the student's thesis director.
3. That honors independent study be substituted for no more than three credits of a student's required professional electives credits.

It is recommended that students seeking this option seek special advising from their faculty mentor. Honors Research Methods (ARCH 4723H) is one venue for advising on independent study questions. As it is helpful for students to know what is expected of them, the work products of the honors independent study (research paper, models, prototypes, etc.) should be determined, and agreed upon, by the professor and student before the student registers for the credits. The School of Architecture Director of Student Affairs will register a student for Honors Special Projects (ARCH303VH) only upon receipt of a syllabus or prospectus for the independent study from the student. The course requirements should be distinguishable in the professor's estimation from non-honors independent study and consonant with expectations for honors credit in other departmental courses.

Architecture Honors Thesis /Research Project

All honors students will pursue a research project during the final year of their undergraduate program. Honors students in the Bachelor of Architecture curriculum will invest six credit hours in the development of theses that articulate research topics identified in the Honors Architectural Research Methods (ARCH 4723H) or the Methods of Research in Architectural History Colloquium. Honors students in the Bachelor of Science in Architectural Studies program invest six credit hours in the honors thesis. Students pursuing the History of Architecture and Urbanism major concentration will develop traditional written honors theses. Additionally, honors students are required to enroll in three credit hours of upper-level elective coursework related to the topic of the honors thesis. Guidelines for topic selection and preparation of the honors thesis/research project are available from the Architecture Honors Committee.

The honors thesis is a student-directed project supervised by a thesis director with expertise in the thesis topic. The thesis director, who must be a faculty member in the Department of Architecture chairs a thesis committee to be comprised of two other members, typically, a departmental faculty member and a non-departmental
faculty member who brings additional fields of knowledge to the project. In rare cases when the thesis director, in consultation with the Department Honors Committee and the student, determines that a non-departmental faculty member with expertise appropriate to the thesis in question cannot be identified on campus, an extra-disciplinary member from within the Department of Architecture (e.g., faculty in architectural history, technology, or other allied field) may be fill the position of the non-departmental member. Any such exceptions to the standard membership of a thesis committee should be infrequent, as the point of including non-departmental participation is to help ensure that a student’s research is understandable and valid to an informed community outside of the disciplines of architecture. The determination should be based on the extent to which a student’s thesis would have to be altered unproductively to meet the requirement for non-departmental participation on the thesis committee. Additional faculty, both departmental or non-departmental, as well as non-academic experts, may participate in any honors thesis as non-committee members, if thesis director welcomes their involvement.

Students will complete and present a written prospectus for the Research Thesis no later than the Friday before spring break before the fall semester of the final year of study, (e.g. the semester prior to the thesis).

Students shall meet a schedule of interim requirements established by the thesis committee in consultation with the Architecture Honors Committee.

### Requirements for Architecture Honors Program Scholars

#### The Distinguished Scholars Program

<table>
<thead>
<tr>
<th>For Distinguished Scholars in the Bachelor</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of 38 credit hours of honors designated courses, to include a minimum of:</td>
<td></td>
</tr>
<tr>
<td>University Core Honors Courses</td>
<td>12</td>
</tr>
<tr>
<td>Professional Core Honors Courses in Architecture (Architectural Technology and/or History of Architecture)</td>
<td>11</td>
</tr>
<tr>
<td>Honors Professional Electives or upper-level (3000+) university honors courses</td>
<td>6</td>
</tr>
<tr>
<td>Honors Research Methods (ARCH 4723H) or approved Methods course</td>
<td>3</td>
</tr>
<tr>
<td>Honors Thesis/Theis Project (ARCH 5016H)</td>
<td>6</td>
</tr>
</tbody>
</table>

#### For Distinguished Scholars in the Bachelor of Science in Architectural Studies

| Completion of 38 credit hours of honors designated courses, to include a minimum of: | |
| University Core Honors Courses | 12 |
| Professional Core Honors Courses in Architecture (Architectural Technology and/or History of Architecture) | 11 |
| Honors Professional Electives or upper-level (3000+) university honors courses | 6 |
| Honors Research Methods (ARCH 4723H) or approved Methods course; or architectural research colloquium | 3 |
| Honors Thesis (ARCH 5016H) | 6 |

### The Departmental Scholars Program

#### For Departmental Scholars in the Bachelor of Architecture

| Completion of 18 credit hours of honors designated courses, to include a minimum of: | |
| Professional Core Honors Courses in Architecture (Architectural Technology and/or History of Architecture) | 3 |
| Honors Professional Electives or upper-level (3000+) university honors courses | 6 |
| Honors Research Methods (ARCH 4723H) or approved methods course | 3 |
| Honors Thesis/Theis Project (ARCH 5016H) | 6 |

#### For Departmental Scholars in the Bachelor of Science in Architectural Studies

Completion of 18 credit hours of honors designated courses, to include a minimum of:
- Professional Core Honors Courses in Architecture (Architectural Technology and/or History of Architecture) 3
- Honors Professional Electives or upper-level (3000+) university honors courses 6
- Honors Research Methods (ARCH 4723H); approved methods course; or architectural research colloquium 3
- Honors Thesis (ARCH 5016H) 6

### Architecture Honors Program Committee

The chair of the School of Architecture Honors Program faculty members representing the allied fields of studio design, history/theory and building technologies comprise the Architecture Honors Program Committee. The committee serves to:
- Review courses for honors designation.
- Review nominations of eligible students to join the Architecture Honors Program.
- Serve as ambassadors for the Department and its Honors Program.

The committee shall meet at least once each semester, and at the discretion of the department head and the chair of the School Honors Program.

### Interior Design Honors Program

The Fay Jones School of Architecture Interior Design Honors Program provides upper-division undergraduate students with an opportunity to formally participate in creative and scholarly activities in interior design. Honors candidates engage in independent study and research and participate in special honors seminars and colloquia. These learning opportunities are led by the interior design faculty and are tailored to meet student’s unique interests and professional trends.

Students may apply for honors studies beginning in the second semester of their sophomore year and normally will not be accepted into the program after completion of the second semester of their junior year. The program requires each applicant to have:
- minimum cumulative grade-point average of 3.5 in all college course work,
- minimum grade-point average of 3.5 in all course work taken in interior design,
- take 12 hours in honors studies // enroll in honors colloquia when available,
- enroll in six hours of honors research // 6 hours of thesis
- student must complete and defend an honors thesis

Each honors student will be required to select an honors committee. The committee will comprise the honors thesis adviser (a faculty member in the Interior Design program and major teacher in the area of the honors project), a second faculty member from interior design, architecture, or landscape architecture program chosen by the student, and a member from outside the department chosen by the thesis adviser and student. This committee is responsible for hearing and seeing the work of the student in the area of the honors project and will administer the oral examination to the candidate at the end of the last semester of the student’s work. The committee then recommends the student receive honors in interior design. Outstanding student achievement will be recognized by awarding the distinction “Cum Laude” at graduation. The award of higher degree distinctions is recommended only in truly exceptional cases and is based upon the whole of the candidate’s program of honors studies.

### Department of Landscape Architecture Honors Program

#### Landscape Architecture Honors Mentors

Each Honors student shall have a department faculty adviser who will consult with the student throughout the university experience. The adviser will meet with the student at least once during the summer. These sessions are venues for students to discuss their honors emphasis or concentration, academic progress, course work, community service activities, and leadership development opportunities.
Landscape Architecture Honors Thesis

An Honors student will be required to fulfill 6 credit hours of a written academic thesis. For the written thesis, the student shall take a 3-credit-hour professional elective directly related to the thesis topic, and 3 credit hours of Special Projects with student’s thesis advisor or other faculty designee. Landscape Architecture Study students will be required to take a 2 credit hour Research Thesis Prep in advance of two 3 credit hour Special Topics in Design Research courses as partial fulfillment of the 6-credit thesis requirement. The last requirement will be a presentation and defense of the work to a jury from the department and other relevant academic advisers. All Honors students are highly encouraged to take a research methods course within the subject or topic area prior to thesis work.

Landscape Architecture Honors Courses

Honors courses within the Professional Core may be fulfilled through independent study or additional honors level work within the History of Landscape Architecture, Contemporary Landscape Architecture, Planting Design, Historic Preservation, Seminar, Construction II, III, and Construction IV courses. and Senior Demonstration Project Prep course. The student may also select honors work within Design Studio IV, V, VI, VII, or VIII. Additional work may include in-depth precedent research and design applications with a focus on research and writing as the product of additional work in the declared area of emphasis or concentration. Specific honors output expectations will be determined by the course instructor. In addition, a student may choose an independent studio with mutual faculty agreement. This studio option is in addition to the required studios in the professional program and would only be available during the spring or summer semester of the fourth or fifth year.

Department of Landscape Architecture

Honors Program Requirements

The Distinguished Scholars Program

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of 38 credit hours of honors designated courses.</td>
<td>12</td>
</tr>
<tr>
<td>University Core or Electives at the Honors level</td>
<td>11</td>
</tr>
<tr>
<td>Landscape Architecture Professional Core at the Honors level, which may include design studio, construction laboratory, or history class</td>
<td>9</td>
</tr>
<tr>
<td>Professional Electives, as identified with the Professional Core, at the Honors level, which may include coursework within the Landscape Architecture Department or from other University department programs.</td>
<td>6</td>
</tr>
<tr>
<td>Honors Thesis or project as described below</td>
<td>6</td>
</tr>
</tbody>
</table>

For Distinguished Scholars in the Bachelor of Science in Landscape Architectural Studies

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of 40 credit hours of honors designated courses, to include a minimum of</td>
<td>12</td>
</tr>
<tr>
<td>University Core Honor</td>
<td>20</td>
</tr>
<tr>
<td>Professional Core Honors Courses in Landscape Architecture (History of Landscape Architecture, Contemporary Landscape Architecture) or Honors Professional Electives</td>
<td>2</td>
</tr>
<tr>
<td>Research Thesis Preparation</td>
<td>6</td>
</tr>
<tr>
<td>Honors Thesis Research Project</td>
<td>6</td>
</tr>
</tbody>
</table>

Department of Landscape Architecture Honors Program Requirements

For Departmental Scholars in the Bachelor of Landscape Architecture Program

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of 18 credit hours of honors designated courses.</td>
<td>12</td>
</tr>
</tbody>
</table>

For Distinguished Scholars in the Bachelor of Science in Landscape Architectural Studies

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of 20 credit hours of honors designated courses.</td>
<td>12</td>
</tr>
<tr>
<td>Honors Landscape Architectural Professional Electives and/or University Honors Core Courses</td>
<td>2</td>
</tr>
<tr>
<td>Research Thesis Preparation</td>
<td>6</td>
</tr>
<tr>
<td>Honors Research Thesis</td>
<td>6</td>
</tr>
</tbody>
</table>

ACCREDITATIONS

The architecture program was founded in 1946 and has been accredited by the National Architectural Accrediting Board (NAAB) since 1958. The landscape architecture program was established in 1975 and has been accredited by the Landscape Architecture Accreditation Board (LAAB) of the American Society of Landscape Architects (ASLA) since 1983. The school holds memberships in the Association of Collegiate Schools of Architecture (ACSA) and the Council of Educators in Landscape Architecture (CELA), organizations that comprise North American schools of architecture and landscape architecture.

In the United States, most state registration boards require a degree from an accredited professional degree program as prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture and the Doctor of Architecture. A program may be granted a six-year, three-year, or two-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Arkansas Fay Jones School of Architecture department of architecture offers the following NAAB-accredited degree program:
- B.Arch. (157 undergraduate credits)
- B.L.A. (117 undergraduate credits)

The next accreditation visit for the B.Arch. program is 2014.

The Landscape Architecture Accreditation Board (LAAB) is the sole agency authorized to accredit U.S. professional degree programs in Landscape Architecture. LAAB recognizes the Bachelor of Landscape Architecture, Bachelor of Science in Landscape Architecture, and Masters of Landscape Architecture. It accredits each program every five years, evaluating degree of conformance with established education standards. Masters degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The Bachelor of Interior Design (B.I.D.) degree is accredited by the Council for Interior Design Accreditation (CIDA). CIDA is an independent, non-profit accrediting organization for interior design education programs at colleges and universities in the United States and Canada. To ensure conformance with educational standards, programs must seek re-accreditation every six years. The program, accredited since 1992, is the oldest accredited interior design program in the state of Arkansas.
DEPARTMENTAL MAJORS

ARCHITECTURE (ARCH)

Departmental Office
112 W. Center Street, Suite 700
479-575-4705

FACULTY
• University Professor Emeriti Smart
• Distinguished Professors Blackwell, Luoni
• Professors Goodstein-Murphree, Shannon, Vitali, Wall
• Associate Professors Herman, Messadi, Sexton, Terry
• Assistant Professor Perez
• Clinical Associate Professor Sarpaneva
• Clinical Assistant Professors Fitzpatrick, Rotolo, Rudzinski
• Adjunct Assistant Professors Bedeschi, Del Gesso

Bachelor of Architecture Degree

1. Completion of the following 94-hour professional program:
   Architectural Design
   ARCH 1015, ARCH 1025, ARCH 2016, ARCH 2026,
   ARCH 3016, ARCH 3026, ARCH 4016,
   ARCH 4026, ARCH 5016, ARCH 5026
   94
   Architectural Technology
   ARCH 1212, ARCH 2113, ARCH, 2123, ARCH 2132,
   ARCH 3134, ARCH 4154
   58
   History and Theory of Architecture
   ARCH 1222, ARCH 2233, ARCH 2243, ARCH 4433,
   ARCH 4523
   18
   Professional Practice
   ARCH 5314
   4
2. Completion of the 35-hour general University Core as listed on page 41. In addition, specific requirements are listed below:
   Mathematics
   MATH 1213, MATH 2033, MATH 2043 or MATH 2053
   3
   Laboratory Science
   PHYS 1044 or PHYS 2013/2011L, required.
   PHYS 1054 or PHYS 2033/2031L, strongly recommended.
   8
3. Completion of 30 hours of electives, as follows:
   Professional Electives
   Chosen from upper-level courses (courses numbered 3000
   or above) taught on the Fayetteville campus in the Fay Jones School
   of Architecture and allied disciplines.
   Students participating in the Rome program may present only
   three hours of elective course work for professional elective
   credit. All other elective courses will be used to fulfill free elective
   requirements.
   Free Electives
   15
   4. A minimum of 157 hours with a 2.00 cumulative grade-point average at this
   institution both in all work attempted and in all professional course work
   attempted is required. See Academic Policies.
5. Participation for at least one semester in an approved international educational
   experience. (See Off-Campus Study Requirement, page 111.)
   NOTE: No more than three hours of physical education and/or R.O.T.C. may
   be counted toward a degree. Courses not acceptable toward degree credit include
   those of a remedial or orientation nature and whose content are considered to be
   measurably duplicated elsewhere in the curriculum. ARCH 1003 is not counted
   toward degree credit for architecture majors.

By following the preceding curriculum, students will meet the state-mandated
University Core Requirements. They must also meet all other University require-
ments for graduation (page 41).

Sample curriculum for the Bachelor of Architecture degree can be obtained from
the school’s advising center.

Professional Licensure Degree Requirement

The National Architectural Accrediting Board (NAAB) only accredits profes-
sional programs offering the Bachelor of Architecture, which requires a minimum of
five years of study, and the Master of Architecture degrees. These professional degrees
are structured to educate those who aspire to registration and licensure to practice as
architects. The curricular requirements for awarding these degrees must include
three components — general studies, professional studies, and electives. Together
these three components comprise a liberal education in architecture and ensure that
graduates will be technically competent, critical thinkers who are capable of defining
multiple career paths within a changing societal context.

While no four-year degrees are accredited by NAAB, the Bachelor of Science in
Architectural Studies degree is excellent for those who want a foundation in the field
of architecture as preparation for either continued education in a professional degree
program or for employment in fields related to architecture.

Major Concentration in the History of Architecture and Urbanism

The major concentration (not considered an official minor) in the History of
Architecture and Urbanism requires at least 33 semester hours and must include the following:

1. Completion of requirements for admission to the professional program
   in architecture, including ARCH 2233, ARCH 2243, ARCH 4433 and
   ARCH 4523, and presentation of a 3.25 grade-point average.
2. At least nine hours of professional electives in the history and theory of
   architecture and urbanism. Sample courses in this specialization include the
   following:
   American Architecture and Urbanism – select from
   ARCH 4483 Architecture of the Americas
   ARCH 5933 Preservation & Restoration
   ARCH 4023 City in American Art and Culture
   ARCH 4023 House Culture
   LARC 3413 History of Landscape Architecture
   LARC 4413 Contemporary Landscape Architecture
   Students declaring a specialization in American Architecture may develop
   an emphasis in Historic Preservation; ARCH 5933 is required for the
   emphasis.
   Early Modern (Renaissance and Baroque) Italy – select from
   ARCH 4023 Italian Arch. from the Renaissance to the Present
   ARCH 5493 History of Urban Form
   ARCH 4023 St. Peter’s Basilica
   ARCH 4023 Art and Culture in Italy
   ARCH 2993 Architecture of the City, Rome
   LARC 3413 History of Landscape Architecture
   Modern Architecture and Urbanism – select from
   ARCH 4483 Architecture of the Americas
   ARCH 4523 Architectural Theory
   ARCH 4023 City in American Art and Culture
   ARCH 4023 House Culture
   ARCH 4023 Italian Architecture from the Renaissance
to the Present
   ARCH 4653 Architecture of the City, Rome
   LARC 4413 Contemporary Landscape Architecture
   3. Three hours, Methods of Architectural Research Colloquium
4. At least twelve hours of free electives to be selected from the following areas, to include:
   a. At least three hours in upper-level (3000+) art history courses related to the area of specialization.
   b. At least three hours in upper-level (3000+) humanities or social science courses related to the area of specialization; students pursuing the historic preservation emphasis must select ANTH 5023 or ANTH 5443.
   c. Foreign Language requirements to be determined in consultation with adviser. Students who intend to pursue graduate study in architectural history should have competency in at least one foreign language; French and/or German are recommended.
5. At least six to 12 hours of research thesis.
6. Students considering pursuing the major concentration in History of Architecture and Urbanism are encouraged to fulfill the humanities and social science requirements of the 35-hour University Core with selections from the following courses.
   ARHS 1003 Art Lecture
   WLIT 1113 World Literature I
   WLIT 1123 World Literature II
   CLST 1003 Intro. to Classical Studies, Greece
   CLST 1013 Intro. to Classical Studies, Rome
   HIST 1113 Institutions and Ideas of World Civilizations I
   HIST 1123 Institutions and Ideas of World Civilizations II
   HIST 2003 History of the American People to 1877
   HIST 2013 History of the American People 1877 to the Present
   ANTH 1023 Intro. to Cultural Anthropology
   Any foreign language, 2003 or 2013.

Minor Concentration in the History of Architecture and Urbanism

The minor concentration in the History of Architecture and Urbanism (not considered an official minor) requires at least 18 semester hours and must include the following:
1. Completion of requirements for admission to the professional program in architecture, including ARCH 2233, ARCH 2243 and ARCH 4433.
2. At least nine hours of professional electives in any area of architectural and urban history.
3. Three hours, Methods of Architectural Research Colloquium
4. At least six hours in humanities and/or social science courses related to the minor concentration.
5. The research thesis is optional for students in the minor.
6. See Major Concentration list above.

Architecture B.Arch.

Ten-Semester Degree Program

The professional program for a Bachelor of Architecture Degree requires 10 semesters of coursework and so is not eligible for the Eight-Semester Degree Completion Program. It also requires admission to the professional program after the third year of classes. However, the following 10-semester sample plan shows how a first-year student could obtain a Bachelor of Architecture Degree in five years if the student is admitted to the Fall-Spring Architectural Design Studio and subsequently is admitted to the professional program. Students not accepted into the fall studio will begin ARCH 1015 in the first six weeks of the summer. Students should be aware that PHYS 1044, PHYS 1054 (or an approved alternate laboratory science in the University Core) and one of the listed MATH courses must be completed before students can begin second-year courses in Architecture. Transfer students and students who change majors and seek exceptions to the sample curriculum will be reviewed on an individual basis.

Students in the professional program are required to participate in an approved study abroad experience. Students can choose from either a fall or spring semester of 4th year in Rome, Italy or a summer program (summer prior to 4th or 5th year) in a designated Latin or Central American country. Students can elect to participate in both but only one program can serve as a substitution for ONE fourth year studio semester. The additional program would go to professional elective hours.

Fall Semester Year 1
5  ARCH 1015 Architectural Design I

Spring Semester Year 1
5  ARCH 1025 Architectural Design II
2  ARCH 1222 Design Thinking II: Foundations in History
3  ENGL 1023 Composition II
3  MATH 1213 Plane Trigonometry, MATH 2033 Mathematical Thought, MATH 2043 Survey of Calculus, or MATH 2053 Finite Mathematics

Science Core Requirement. Recommended: PHYS 1054 Physics for Architects II and lab
0  ARCH 1120 Leadership by Design II

Fall Semester Year 2
6  ARCH 1026 Architectural Design IV
3  ARCH 2243 History of Architecture II
3  ARCH 2123 Architectural Technology II
3  Social Science core requirement

Spring Semester Year 2
6  ARCH 2026 Architectural Design V
3  ARCH 2253 Architectural Technology III
3  ARCH 3134 Building Materials and Assemblies
3  Fine Arts or Humanities core requirement

Fall Semester Year 3
6  ARCH 3016 Architectural Design V
3  ARCH 4433 History of Architecture III
4  ARCH 3134 Building Materials and Assemblies
3  Fine Arts or Humanities core requirement

Spring Semester Year 3
6  ARCH 3026 Architectural Design VI-Technology Studio
3  ARCH 4523 Architectural Theory
3  Social Science core requirement
3  Fine Arts or Humanities core (students who elected summer studio will have completed this requirement)

Fall Semester Year 4

Fall Rome Program in the Fall
6  ARCH 4116 Architectural Design Studio-Rome
6  ARCH 4023 Advanced Architectural Studies, Rome
3  ARCH 4653 Architecture of the City

Spring Rome Program in the Fall
6  ARCH 4026 Comprehensive Studio
4  ARCH 4154 Environmental Technology II and Building Systems
3  Professional Elective
3  3 Free elective

Summer Studio Abroad Program in the Fall
6  ARCH 4016 Architectural Design VII
4  ARCH 4154 Environmental Technology II and Building Systems
3  Professional Elective
3  Free elective

All university core courses must be completed by the end of the third year. Admission to ARCH 4016 is contingent upon admission to the professional program.
Fay Jones School of Architecture

Bachelor of Science in Architectural Studies

The Bachelor of Science in Architectural Studies incorporates course work from the school with liberal studies for students with interests that fall outside the parameters of the accredited professional degree program. The architectural studies program provides opportunities for students who wish to prepare for graduate study in an accredited architecture program or in an allied discipline, such as architectural history, historic preservation, urban planning, or construction management, as well as serving students who seek opportunities in related fields that may not require the five-year accredited degree.

Requirements for a Bachelor of Science Degree in Architectural Studies

1. Completion of the following 37-hour architectural studies program:
   Architectural Design
   ARCH 1015, ARCH 1025, ARCH 2016
   16
   Architectural Technology
   ARCH 1212, ARCH 2113, ARCH 2123, ARCH 2132 or LARC 2714, LARC 3724
   10
   History and Theory of Architecture
   ARCH 1222, ARCH 2233, ARCH 2243, ARCH 4433 (Students interested in Landscape Architecture may substitute LARC 3413 for ARCH 2233 or ARCH 2243.)
   11

2. Completion of the following 35-hour general education program:
   English Composition
   ENGL 1013, ENGL 1023
   6
   American History or Government
   HIST 2003 or HIST 2013 or PLSC 2003
   3

3. Completion of the following 21-hour basic program in the arts:

   Communications
   COMM 1313
   3
   Humanities and Social Sciences
   HIST 1113 and HIST 1123
   9
   WLIT 1113 and 3 hours from WLIT 1123; a foreign language literature course; CLST 1003 or CLST 1013, (CLST 1003 or CLST 1013 are recommended for architectural studies students.)
   12
   Arts and Sciences
   At least six hours in courses numbered above 3000 (not including any courses cross-listed with architecture).
   6

4. Completion of the following foreign language requirement.

   Foreign Language (depending upon placement)
   Students must demonstrate proficiency in a single modern or classic language other than English, usually by completing a sequence of four courses (1003, 1013, 2003, 2013). Students meeting the normal admission standard (two years of one foreign language in high school) may expect to satisfy this requirement with fewer courses, depending upon placement.
   0-12

5. Completion of 21 hours of electives:

   Professional electives
   At least 6 hours in upper-level (3000 or above) courses taught in the School of Architecture. The remaining professional elective credits may be additional upper-level courses in the School of Architecture, approved courses in an allied discipline, or courses in another department of the University that contribute to the fulfillment of a recognized minor.
   12
   Free electives
   A minimum of six hours in courses numbered above 3000 (not including any courses cross-listed with architecture).
   9

6. A minimum of 124 hours with a 2.00 cumulative grade-point average at this institution both in all work attempted and in course work completed in the School of Architecture.

7. Presentation of at least 40 semester hours in courses numbered 3000 or above or courses in the School of Architecture numbered 2000 with specific course prerequisites.

8. Each student graduating in Architectural Studies must write a research/analytical paper in at least one upper-division course in her or his major or minor area.

9. Course work taken to remove course deficiencies assigned during admission or transfer will not be counted toward the degree. Similarly, courses considered to be remedial or developmental will not count toward the degree.

10. Unless exceptions are granted at the time of admission to the University of Arkansas, transfer work in which grades of “D” or “F” were earned will not be allowed toward credit for graduation. See the Academic Regulations chapter in this catalog for more information.

See Page 316 for Architecture (ARCH) courses.
Architectural Studies B.S.
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. During the first year, students who have been admitted to the fall-spring design studio and students who have been to the spring-summer design studio follow different schedules, both of which are listed below, with the fall-spring studio first and then the spring-summer studio. The second, third and fourth years are identical for both scenarios.

Fall-Spring Design Studio

Fall Semester Year 1
5 ARCH 1015 Design I
2 ARCH 1212 Design Methods I
3 ENGL 1013 Composition I
3 HIST 2003 or 2013 American History or PLSC 2003 American Government
4 PHYS 1044 Physics for Architects I
0 ARCH 1110 Leadership by Design

17 Semester hours

Students are reviewed at the end of the fall semester and may continue the program if they meet the following criteria: "C" or better in ARCH 1015, Architectural Design I; "C" or better in PHYS 1044, Physics for Architects I or an approved equivalent; "C" or better in ARCH 1212, Design Thinking I: Foundations in Technology; Maintain a 2.0 GPA. Students who do not meet these criteria will be informed and will not be allowed to continue in the program.

Spring Semester Year 1
5 ARCH 1025 Design II
2 ARCH 1222 Design Thinking II: Foundations in History
3 ENGL 1023 Composition II
3 MATH 1213 Plane Trigonometry, MATH 2033 Mathematical Thought, MATH 2043 Survey of Calculus or MATH 2053 Finite Mathematics
4 Science Core; Recommended: PHYS 1054 Physics for Architects II
0 ARCH 1200 Leadership by Design

17 Semester hours

Spring-Summer Design Studio

Fall Semester Year 1
3 MATH 1213 Plane Trigonometry, MATH 2033 Mathematical Thought, MATH 2043 Survey of Calculus or MATH 2053 Finite Mathematics
3 ENGL 1013 Composition I
3 HIST 2003 or 2013 American History or PLSC 2003 American Government
4 PHYS 1044 Physics for Architects I Social Science Core
3 Fine Arts or Humanities Core Requirement
0 ARCH 1110 Leadership by Design

16 Semester hours

These students may continue into ARCH 1015 Architectural Design I in the spring if they meet the following criteria: "C" or better in PHYS 1044 Physics for Architects I or an approved equivalent; Maintain a 2.0 GPA. Students who do not meet these criteria will be delayed until they satisfy the admission criteria for the Department of Architecture. Students will be reviewed at the end of the spring semester and will not be allowed to continue in the program if they do not meet the following criteria: "C" or better in ARCH 1015 Architectural Design I; "C" or better in ARCH 1212 Design Thinking I: Foundations in Technology; Maintain a 2.0 GPA.

Spring Semester Year 1
2 ARCH 1222 Design Thinking I: Foundations in History
5 ARCH 1015 Architectural Design I
3 ENGL 1023 Composition II
4 Science Core; Recommended: PHYS 1054 Physics for Architects II
3 Fine Arts or Humanities Core Requirement
0 ARCH 1120 Leadership by Design

17 Semester hours

Summer Session Year 1
5 ARCH 1025 Architectural Design II
2 ARCH 1212 Design Thinking I: Foundations in Technology

7 Semester hours

Prior to Second Year

PHYS 1044, PHYS 1054 (or an approved alternate laboratory science in the University Core) and MATH 1213, MATH 2033, MATH 2043 or MATH 2053

must be completed before students can begin second-year courses in Architecture. Transfers students and change-of-majors seeking exceptions to the eight-semester degree plan will be reviewed on an individual basis.

Fall Semester Year 2
6 ARCH 2016 Architectural Design III
3 ARCH 2233 History of Architecture I
3 ARCH 2113 Architectural Structures I
2 ARCH 2132 Environmental Technology I
3 Social Science Core

17 Semester hours

Spring Semester Year 2
3 ARCH 2243 History of Architecture II
3 ARCH 2123 Architecture Structures II
3 COMM 1313 Public Speaking
3 Fine Arts/Humanities Core
3 Social Science Core

15 Semester hours

Fall Semester Year 3
3 ARCH 4433 History of Architecture III
3 HIST 1003 Institutions and Ideas of Western Civilization I or HIST 1113 World Civilization I
3 WLIT 1113 World Literature I
3 Foreign Language

12 Semester hours

Spring Semester Year 3
3 Fine Arts/Humanities Core
3 HIST 1013 Institutions and Ideas of Western Civilization II or HIST 1123 World Civilization II
3 WLIT 1123 World Literature II; CLST 1003 Intro to Classical Studies: Greece; or CLST 1013 Intro to Classical Studies: Rome
3 Foreign Language
3 Free Elective

15 Semester hours

Fall Semester Year 4
3 Foreign Language
3 Upper-level Arts/Science Elective
3 Free Elective
3 Professional Elective
3 Professional Elective

15 Semester hours

Spring Semester Year 4
3 Upper-level Arts/Science Elective
3 Foreign Language
3 Free Elective
3 Professional Elective
3 Professional Elective

15 Semester hours

124 Total hours

Architectural Studies degree candidates may pursue an academic minor. The minor must be in a field other than the major area, and students must notify the department of their intention to minor. An academic minor ordinarily consists of 15-18 hours. Although students in architectural studies may choose from any recognized minor offered by the university, they are encouraged to consider the following fields:

- African-American Studies
- Anthropology
- Art History
- Business Administration
- Classical Studies
- Communication
- Computer Sciences
- Drama
- Economics
- English
- Environmental Studies
- European Studies
- Gender Studies
- Geography
- History
- Historic Preservation
- Latin-American Studies
- Philosophy
- Psychology
- Political Science
- Sociology
- Sustainability

Although foreign study is not required of candidates for the four-year degree,
students in the architectural studies curriculum are encouraged to participate in the school’s off-campus study programs in Rome and Latin/Central America. Architectural studies majors also may take advantage of the community service opportunities offered through the University of Arkansas Community Design Center (UACDC).

To take maximum advantage of the opportunities the four-year degree offers for pre-professional development (cultivation of specialization in and related to the field, and/or preparation for graduate study) each candidate for the Architectural Studies degree will work with a faculty adviser to develop a program of study emphasizing a student’s special interests.

A sample curriculum for the Bachelor of Science in Architectural Studies degree can also be obtained from the school’s advising center.

See Page 316 for Architecture (ARCH) courses.

INTERIOR DESIGN (IDES)

Interim Department Office
Agricultural Annex
479-575-7599

FACULTY
• Associate Professors Gentry, Miller, Webb

Interior design, a CIDA-accredited program, combines a solid foundation of professional courses that are enhanced by classes in business, art, and architecture.

To promote a broader perspective of design, students are encouraged to participate in study abroad opportunities offered by the Fay Jones School of Architecture. In addition, both overnight and day field trips are required for studio courses. Participation in the supervised 200 hour internship experience is also required for graduation.

Participation in the supervised 200 hour internship experience is required for graduation. The one-credit hour summer internship occurs in the summer before fourth year. Students have been placed in interior design firms, architectural offices, Main Street programs, governmental agencies, hospitality and casino design firms, and a wide range of other allied industries. Geographically, students have completed internships in Los Angeles, San Francisco, Seattle, New York, Las Vegas, Washington, D.C., Denver, Dallas, Chicago, Kansas City, and other major cities in the United States, as well as international locations such as London and Edinburgh.

The studio sequence increases in complexity throughout the curriculum. The rigor of the program requires a significant commitment of time and energy. Students can expect to spend significant time independent of studio classes to complete projects.

The faculty is composed of well-qualified educators and practitioners who foster an attitude of inquiry and learning based on their individual skills and interests. A professional advisory board supports the program and serves as external critics/jurors. Intellectual development of students is stimulated and leadership qualities enhanced throughout the four-year curriculum. The Interior Design Organization (IDO) allows for interaction of students with professionals in interior design and allied professions. Both faculty and students participate in professional design association activities.

Ownership of Work

All original work submitted for credit, including design studio projects, becomes the property of the Interior Design program. Students are required to maintain portfolios documenting all academic and design studio work. Digital copies (compact disc) of all work completed in a studio must be submitted to the studio year coordinator in order to receive a grade for the studio.

Interior Design Computer Policy

In response to industry demands, the program requires laptop computers. All students enrolled in the Interior Design Program are required to supply, by the beginning of the fourth semester, a personal laptop computer matching or exceeding specifications issued by faculty. The specifications, which are updated annually, are available through the school’s Web site or the interior design student handbook. A substantial amount of software may be required depending on specific course requirements.

Interior Design B.I.D.
Nine-Semester Degree Plan

The Bachelor of Interior Design can be completed in nine semesters that includes a summer internship. The one-credit hour summer internship occurs in the summer before fourth year. Please see the Fay Jones School of Architecture Advising Center for specific core course requirements and elective options.

Fall Semester Year 1
1  IDES 1011 Leadership by Design I
4  IDES 1034 Studio 1: Design Exploration I
3  Fine Arts or Humanities
3  ENGL 1013 Composition I
3  MATH 1203 College Algebra
14  Semester hours

Spring Semester Year 1
3  IDES 2853 Textiles for Interior Designers
4  IDES 1044 Studio 2: Exploration II
3  IDES 2853 Textiles for Interior Designers
3  ENGL 1023 Composition II
4  Science core
15  Semester hours

Fall Semester Year 2
5  IDES 2805 Studio 3: Basic Planning and Communication
3  IDES 2883 History of Interiors
3  ART/ARCH elective
3  ECON 2013, 2023 or 2143
3  Social Science
17  Semester hours

Spring Semester Year 2
5  IDES 2815 Studio 4: Intermediate Space Planning and Design
3  IDES 2823 Materials and Resources
3  HIST 2003, HIST 2013 or PLSC 2003
4  Social Science
3  Fine Arts or Humanities
17  Semester hours

Fall Semester Year 3
5  IDES 3805 Studio 5: Design and Construction
3  IDES 3833 Building Systems
1  IDES 3841 Professional Development
3  ARCH 4433 Architectural History III
3  ARCH 4433 Architectural History III
15  Semester hours

Spring Semester Year 3
5  IDES 3815 Studio 6: Large Scale Commercial Interiors
3  IDES 3843 Lighting Systems
3  IDES 4813 Human Factors in Interior Design
6  Professional Electives
17  Semester hours

Summer Semester Year 3
1  IDES 4811 Internship for Interior Design
1 Semester hour

Fall Semester Year 4
5  IDES 4805 Studio 7: Comprehensive Design Process I
3  IDES 4823 Professional Practice for Interior Design
6  Professional Electives
14  Semester hours

Spring Semester Year 4
5  IDES 4815 Studio 8: Comprehensive Design Process II
3  Business Elective
3  Professional Elective
4  Science core
15  Semester hours
124  Total hours

Minor in Interior Design

All students seeking an Interior Design minor are required to complete 28 hours in the following courses or their equivalents:

- ___ IDES 1034 Studio 1: Design Exploration I
- ___ IDES 1044 Studio 2: Design Exploration II
- ___ IDES 2805 Studio 3: Basic Space Planning and Communication
Choose 15 hours from:
- IDES 2823 Interior Design Materials and Resources
- IDES 2853 Introduction to Textiles for Interior Designers
- IDES 2883 History of Interiors
- IDES 3843 Lighting and Related Building Systems
- IDES 4813 Human Factors in Interior Design
- HESC 465V Special Topics

See Page 367 for Interior Design (IDES) courses.

LANDSCAPE ARCHITECTURE (LARC)

Mark Boyer, Department Head
Departmental Office
230 Memorial Hall
479-575-4907

FACULTY
- Professor Boyer, Crone
- Associate Professors Brittenum
- Assistant Professors Erdman, Lickwar, Smith
- Garvan Chair Billig

Bachelor of Landscape Architecture Degree

Bachelor of Landscape Architecture Degree

1. Completion of the following Professional core:
   - Design and Graphics 65
   - LARC 1315, LARC 1325, LARC 2113, LARC 2123, LARC 2336, LARC 2346, LARC 3356, LARC 3914, LARC 3366 LARC 4376, LARC 4383, LARC 5386, LARC 5396

Landscape Architecture/ History/Theory 11

LARC 1211, LARC 1221, LARC 3413, LARC 4033, LARC 4413

Summer Study Abroad 6

LARC 3933, LARC 4123

Landscape Architecture Technical Courses 19

LARC 2714, LARC 3724, LARC 3734, LARC 4714, HORT 3103

Professional Practice 3

LARC 5613

2. Completion of the 35-hour University Core as listed on page 41. As part of the University Core, the department recommends the following:
   - Laboratory Science 8
   - BIOL 1543/1541L or BIOL 1613/1611L and GEOL 1113/1111L are recommended.

3. Completion of the following additional general education requirements:
   - Professional Electives 12
     Students may select courses from the Departments of Landscape Architecture and Architecture as well as courses in history, geography, horticulture, art, sociology, environmental studies, and business. These courses can be thematically selected to emphasize urban studies, ecological planning, construction management, and land development.
     - Free Electives 9
     Students are encouraged to take courses outside the Department to broaden their education.

4. Candidates seeking graduation shall achieve a minimum of 157 hours and a minimum of a “C-” in each course within the professional curriculum. The remaining balance of hours shall have a minimum of 2.00 cumulative grade point average.

   Students must maintain a minimum 2.00 cumulative grade-point average to continue in the studio sequence. Any student receiving a “D+/-” or below in the professional core shall repeat the course. Any student with a second “D+/-” or below shall be considered for non-continuance in the program as determined by the department head and faculty.

   To continue in the professional program, the student must submit a portfolio after their second year for faculty review. Please see section “Admission to the Professional Program in Landscape Architecture.”

5. Students in landscape architecture are required to complete the department’s summer study abroad program, after their third year.

NOTE: No more than four hours of physical education and/or R.O.T.C. may be counted toward a degree. Courses not acceptable toward degree credit include those of a remedial or orientation nature and whose content are considered to be measurably duplicated elsewhere in the school’s curriculum.

By following the preceding curriculum, students will meet the state-mandated University Core Requirements. They must also meet all other University Requirements for graduation (page 39). The department strongly recommends that transfer students present eight hours of laboratory science courses selected from botany, biology, geology, and physical science as part of the State Minimum Core.

Students admitted to the university with a completed two-year associate of arts or associate of science degree from an Arkansas state-supported two-year or four-year college or university will receive credit for general education (core) requirements in accordance with ACT 182. All students also must complete any lower division discipline specific courses required for the major as well as all courses required to comply with the conditions of accreditation.

Professional Licensure Degree Requirement

The School’s Bachelor of Landscape Architecture program is accredited by LAAB, which requires that specific criteria be met in a professional program. This five-year professional program gives its graduates the required prerequisite degree to qualify to take the licensing exam and prepares them for practice.

All fifty states require licensure for landscape architects. The primary purpose of this licensure is to "protect the health, safety, and welfare of the public." Most states require that candidates possess an accredited degree in landscape architecture and complete a period of professional experience, working with a licensed landscape architect. Once these requirements are complete, candidates must pass a national, uniform exam, sometimes with additional sections unique to that state. Sample curriculum for the Bachelor of Landscape Architecture degree can be obtained from the school’s advising center.

Landscape Architecture B.L.A.

Ten-Semester Degree Program

The professional program for a Bachelor of Landscape Architecture Degree must be completed in 10 semesters of coursework and so is not eligible for the Eight-Semester Degree Completion Program. However, the following 10-semester sample plan shows how a first-year student could obtain a Bachelor of Landscape Architecture degree in five years if the student is admitted to the Landscape Architecture Design Studio and subsequently is admitted to the professional program.

Fall Semester Year 1
- 5 LARC 1315 Landscape Architecture Design I
- 1 LARC 1221 Intro to Landscape Architecture I
- 4 BIOL 1613/1611L Plant Biology or BIOL 1543/1541L General Biology
- 3 MATH 1203 College Algebra
- 3 ENGL 1013 Composition I
- 1 LARC 1011 Leadership by Design I

17 Semester hours

Spring Semester Year 1
- 5 LARC 1325 Landscape Architecture Design II
- 1 LARC 1221 Intro to Landscape Architecture II
- 4 GEOL 1113/1111L General Geology and lab
- 3 SOCI 2013 General Sociology
- 3 ENGL 1023 Composition II
- 1 LARC 1021 Leadership by Design II

17 Semester hours
Bachelor of Science in Landscape Architectural Studies

The Bachelor of Science in Landscape Architectural Studies program focuses either on landscape architecture studies or on environmental design issues, which serve students who wish to pursue a career in the profession of landscape architecture but do not seek licensure. The program utilizes existing professional courses within the Departments of Landscape Architecture, Architecture and the University to fulfill the required course work. The minimum number of hours of credit required for graduation is 124.

This degree program opens the opportunity to more individuals who have planning and design, business, and law, and graduate degrees in historic landscape preservation, history, public policy, public administration, and journalism.

Requirements for a Bachelor of Science in Landscape Architectural Studies

1. Completion of the following 35-hour landscape architecture studies program:
   - Landscape Architecture Design 18
   - LARC 1315, LARC 1325, LARC 3914, LARC 2113, LARC 2123
   - Landscape Architecture Technology LARC 2714 or LARC 4743 or LARC 3724
   - History and Theory of Landscape Architecture 6
   - Research thesis preparation 2
   - LARC 302V

2. Completion of the following 27-hour basic program in the arts:
   - Communications 3
   - Humanities and Social Sciences 12
   - HIST 1113 and HIST 1123, WLIT 1113 and 3 hours from WLIT 1123 or a foreign language literature course, CLST 1003 or CLST 1013
   - Arts and Sciences 12
   - A minimum of twelve (12) hours in courses numbered above 3000 (not including any courses cross-listed in the School of Architecture.)

3. Completion of the following foreign language requirement:
   - Depending on placement, students must be introduced to a single modern or classic language other than English by completing two courses (1003 and 1013 or 2003 and 2013). Students with two years or more in one foreign language in high school may satisfy this requirement with higher-level course work

4. Completion of 21 hours of electives:
   - Professional Electives 15
   - Credits may be from upper-level (3000 or above) courses from the departments of landscape architecture and architecture, sociology, geography, horticulture or other approved courses in an allied discipline or other courses that contribute to the fulfillment of a recognized minor.
   - Free Electives 9
   - University Core 35

A minimum of 124 hours with a 2.00 cumulative grade-point average at this institution both in all work attempted and in course work completed in the Department of Landscape Architecture and the School of Architecture.

Presentation of at least 40 semesters in courses numbered 3000 or above or courses in the School of Landscape Architecture numbered 2000 with specific course prerequisites.

Each student graduating in Landscape Architectural Studies must write a research/analytical paper in at least one upper division course in his or her major or minor area.

Course work taken to remove course deficiencies assigned during admission or transfer will not be counted toward the degree. Similarly, courses considered to be remedial or developmental will not count toward the degree.

Students admitted to the university with a completed two-year associate of arts or associate of science degree from an Arkansas state-supported two-year or four-year college or university will receive credit for general education (core) requirements in accordance with ACT 182. All students also must complete any lower division discipline or other courses that contribute to the fulfillment of a recognized minor.

A research/analytical paper in at least one upper division course in his or her major or minor area.

Although not a requirement in the four-year degree, students are encouraged to participate in the department’s summer study abroad program. The course work will count towards professional elective requirements.

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 LARC 2336 Landscape Architecture Design III</td>
<td>9</td>
</tr>
<tr>
<td>3 LARC 3413 History of Landscape Architecture</td>
<td></td>
</tr>
<tr>
<td>3 HORT 3103 Woody Landscape Plants</td>
<td></td>
</tr>
<tr>
<td>3 LARC 2113 Design Communications I</td>
<td></td>
</tr>
<tr>
<td>15 Semester hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 2</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 LARC 2346 Landscape Architecture Design IV</td>
<td>12</td>
</tr>
<tr>
<td>3 Social Science Core Requirement</td>
<td></td>
</tr>
<tr>
<td>3 LARC 2123 Design Communications II</td>
<td></td>
</tr>
<tr>
<td>4 LARC 2714 Landscape Architecture Construction I</td>
<td></td>
</tr>
<tr>
<td>16 Semester hours</td>
<td></td>
</tr>
</tbody>
</table>

| Students must be admitted to the Professional Program to continue with this degree completion plan. |

<table>
<thead>
<tr>
<th>Fall Semester Year 3</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 LARC 3356 Landscape Architecture Design V</td>
<td>9</td>
</tr>
<tr>
<td>4 LARC 3724 Landscape Construction II</td>
<td></td>
</tr>
<tr>
<td>4 LARC 3914 Planting Design I</td>
<td></td>
</tr>
<tr>
<td>3 Social Science Core Requirement</td>
<td></td>
</tr>
<tr>
<td>16 Semester hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 3</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 LARC 3366 Landscape Architecture Design VI</td>
<td>12</td>
</tr>
<tr>
<td>3 LARC 4413 Contemporary Landscape Architecture</td>
<td></td>
</tr>
<tr>
<td>4 LARC 3734 Landscape Architecture Construction III</td>
<td></td>
</tr>
<tr>
<td>3 HIST 2003 or 2013 Core Requirement</td>
<td></td>
</tr>
<tr>
<td>16 Semester hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Semester Year 3</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Abroad</td>
<td></td>
</tr>
<tr>
<td>3 LARC 3933 Cultural Landscape Studies</td>
<td></td>
</tr>
<tr>
<td>3 LARC 4123 Urban Form Studies</td>
<td></td>
</tr>
<tr>
<td>6 Semester hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 4</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 LARC 4376 Landscape Architecture Design VII</td>
<td>18</td>
</tr>
<tr>
<td>4 LARC 4714 Landscape Architecture Construction IV</td>
<td></td>
</tr>
<tr>
<td>3 Professional Elective</td>
<td></td>
</tr>
<tr>
<td>3 LARC 4033 Theory</td>
<td></td>
</tr>
<tr>
<td>16 Semester hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 4</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 LARC 5386 Landscape Architecture Design VIII</td>
<td>18</td>
</tr>
<tr>
<td>1 LARC 4281 Senior Project Prep</td>
<td></td>
</tr>
<tr>
<td>3 Fine Arts Core Requirement</td>
<td></td>
</tr>
<tr>
<td>3 LARC 5613 Professional Practice</td>
<td></td>
</tr>
<tr>
<td>13 Semester hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 5</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 LARC 5396 Landscape Architecture Design IX</td>
<td>18</td>
</tr>
<tr>
<td>6 Free electives</td>
<td></td>
</tr>
<tr>
<td>12 Semester hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 5</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Professional electives</td>
<td></td>
</tr>
<tr>
<td>3 Humanities core requirement</td>
<td></td>
</tr>
<tr>
<td>9 Semester hours</td>
<td></td>
</tr>
<tr>
<td>160 Total hours</td>
<td></td>
</tr>
</tbody>
</table>

The YOU of A
## Landscape Architecture Studies B.S.

### Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan while pursuing a Bachelor of Science in Landscape Architectural Studies should see page 41 in the Academic Regulations chapter for university requirements of the program.

### Fall Semester Year 1
- 5 LARC 1315 Landscape Architecture Design I
- 1 LARC 1211 Intro to Landscape Architecture I
- 4 BIOL 1613/1611L Plant Biology or BIOL 1543/1541L General Biology
- 3 MATH 1203 College Algebra
- 1 LARC 1011 Leadership by Design I
- **17 Semester hours**

### Spring Semester Year 1
- 5 LARC 1325 Landscape Architecture Design II
- 1 LARC 1221 Intro to Landscape Architecture II
- 4 GEOL 1113/1111L General Geology and lab
- 3 SOCI 2013 General Sociology
- 3 ENGL 1023 Composition II
- 1 LARC 1021 Leadership by Design I
- **17 Semester hours**

### Fall Semester Year 2
- 3 WLIT 1113 World Literature I
- 3 LARC 3413 History of Landscape Architecture
- 3 LARC 1003 The American Landscape (Fine Arts Core Requirement)
- 3 LARC 2113 Design Communications I
- 3 Free Elective Hours
- **15 Semester hours**

### Spring Semester Year 2
- 3 COMM 1313 Public Speaking
- 4 HIST 2003 or 2013 American History or PLSC 2003 American National Government
- 3 LARC 2123 Design Communications II
- 3 LARC 4413 Contemporary Landscape Architecture
- 3 Arts and Sciences 3000+ level course
- **16 Semester hours**

### Fall Semester Year 3
- 3 Social Sciences Core Requirement
- 3 HIST 1003 or HIST 1113
- 4 LARC 3914 Construction Requirement
- 3 Foreign Language 1003 Requirement
- 3 Arts and Sciences 3000+ level course
- **16 Semester hours**

### Spring Semester Year 3
- 3 Humanities Core Requirement
- 3 HIST 1013 or HIST 1123
- 3 Foreign Language 1013 Requirement
- 3 Arts and Sciences 3000+ level course
- 3 Social Science Core Requirement
- **15 Semester hours**

### Fall Semester Year 4
- 3 WLIT 1123 or CLST 1003, CLST 1013
- 3 Free Elective
- 3 Professional Elective
- 3 Professional Elective
- 3 Arts and Sciences 3000+ level course
- **15 Semester hours**

### Spring Semester Year 4
- 12 Professional Electives
- 3 Free Elective
- **15 Semester hours**

### Total hours
- **124 Total hours**

Landscape Architectural Studies candidates may pursue an academic minor. The minor must be in a field other than the major area, and the students must notify the department of their intention to minor. An academic minor ordinarily consists of 15-18 hours, which are dictated by the department of the minor. Students in Landscape Architectural Studies may choose from any recognized minor offered by the University; however, they are encouraged to consider the following fields:

- History, Business Administration, Classical Studies, Communication, Computer Sciences, Economics, English, European Studies, Gender Studies, Latin-American Studies, Philosophy, Political Science, Psychology, Sociology and Sustainability.

Although foreign study is not required for candidates in Landscape Architectural Studies, students in the curriculum are encouraged to participate in the School of Architecture's off-campus study abroad programs in Europe, Rome and Latin or Central America. Community planning projects are offered through the University of Arkansas Community Design Center (UACDC).

To take maximum advantage of the opportunities of the four-year degree program, each student in the Landscape Architectural Studies program shall work with the department head to develop a program of study emphasizing special interests, to cultivate a specialization related to the field, and to guide preparation for graduate study, if desired.

### Minor in Planting Design

(for Horticulture majors)

**18 Hours Total Required**

**Required Courses:**
- LARC 2113 Design Communications I
- LARC 2714 Landscape Architecture Construction I
- LARC 3914 Planting Design I

**Electives:**
- LARC 1003 Basic Course in the Arts: The American Landscape
- LARC 2123 Design Communications II
- LARC 303V Special Studies
- LARC 3413 History of Landscape Architecture
- LARC 3724 Landscape Construction II
- LARC 4413 Contemporary Landscape Architecture
- LARC 5063 Alternative Stormwater
- HORT 4043 Professional Landscape Management
- HORT 4603 Practical Landscape Planning

See Page 373 for Landscape Architecture (LARC) courses.
J. William Fulbright
College of Arts and Sciences

The college has adopted as its mission the following statement from Fulbright's writings:

... the highest function of higher education is the teaching of things in perspective, toward the purposes of enriching the life of the individual, cultivating the free and inquiring mind, and advancing the effort to bring reason, justice, and humanity into the relations of men and nations.

Consisting of 19 departments and numerous centers and research units, Fulbright College has a twofold mission: to provide a broad, liberal education to all students within the University community and to furnish specialized knowledge at the upper division and graduate levels leading to a professional career. The general education curriculum within the college is designed to assure students' mastery of the English language; provide knowledge of the historical, social, intellectual, and linguistic bases of human culture; provide habits of thought useful in later life; encourage the development of aesthetic, political, and ethical values; and offer the necessary foundation for professional competence or further training in professional or graduate schools. The general education curriculum of the college is based on the Platonic assumption that the pursuit of knowledge is an intrinsically good activity and that it is incumbent upon all members of an enlightened society to engage in that pursuit.

Recognizing that its students must become productive members of contemporary American society, Fulbright College offers undergraduate majors in fields ranging from chemistry and art to journalism, physics, social work and psychology. In addition, the college, in cooperation with the Graduate School, offers course work leading to master's degrees and doctoral degrees. As a natural corollary of their instructional role, faculty members of the college pursue active research programs that enable them simultaneously to provide state-of-the-art education to their students and bring national and international recognition to the University.

In sum, Fulbright College lies at the very heart of the University. The seat of liberal learning within the institution and the state, it is committed to providing excellent general education to all members of the student body and specialized instruction of the highest quality to its own majors.

MISSION AND OBJECTIVES

Few in 20th century America did more to advance the study of international relations or promote human understanding than J. William Fulbright. Committed to the idea that a free society and a peaceful world require, above all, an educated citizenry, he urged with unflagging energy the use of historical perspective, cultural relativity, and scientific objectivity in the study of human affairs. Senator Fulbright, like Thomas Jefferson, Andrew Jackson, and Abraham Lincoln before him, was committed to the belief that an educated, enlightened electorate will act not only in its own self-interest but also in the interest of all the people of the world.

In recognition of J. William Fulbright’s contribution to the cause of liberal education and of his many services to his native state, the Board of Trustees of the University of Arkansas on November 20, 1981, resolved...

The College of Arts and Sciences at the University of Arkansas, Fayetteville, shall be named, henceforth, the J. WILLIAM FULBRIGHT COLLEGE OF ARTS AND SCIENCES. His name will imbue that college, and the University, with his reputation and image for a devoted interest in higher education and its accomplishments through its scholars as reflected in its students.
vices exist to provide aid and direction to students who are non-degree candidates as well as those who are beginning work in the college without having yet decided on a major and those who are planning to attend professional schools such as those for medicine or pharmacy. Advisers in the Fulbright College Advising Center will assist students in program planning and will help them to become aware of and familiar with the academic offerings of the university. Students should consult their advisers on a regular basis, not limited to registration matters but including all areas of their academic careers. Personnel in the Fulbright College Advising Center or the Dean’s office will direct students to the appropriate advising office.

Students should discuss with their advisers opportunities for individual variations as well as regular course requirements. Programs and facilities of particular interest to individuals may include the Honors Program, programs for advanced placement and credit by examination, study abroad and the services of the University Career Development Center.

The Career Development Center administers and interprets tests that measure individual ability, interest, and achievement, and thus may aid also in counseling students about the field of study in which they are most likely to be effective and successful.

For questions regarding advising, contact the Fulbright College Advising Center at 575-3307 or visit online at http://fcac.uark.edu.

DEGREES OFFERED

For a complete list of departmental majors, minors, concentrations, options and coursework, see the chart on pages 126 and 127.

The J. William Fulbright College of Arts and Sciences offers four-year curricula leading to the degrees of Bachelor of Arts (B.A.), Bachelor of Science (B.S.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.M.), and Bachelor of Social Work (B.S.W.). Each candidate for the B.A. and B.S. degrees selects a major field for specialized study. In addition to usual departmental majors there are interdepartmental majors and special programs for students preparing for professional degrees in law, medicine, dentistry, and teaching.

MAJORS AND MINORS

Majors

<table>
<thead>
<tr>
<th>American Studies</th>
<th>Geology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>German</td>
</tr>
<tr>
<td>Art</td>
<td>History</td>
</tr>
<tr>
<td>Biology</td>
<td>International Relations</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Journalism</td>
</tr>
<tr>
<td>Classical Studies</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Communication</td>
<td>Music</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Drama</td>
<td>Physics</td>
</tr>
<tr>
<td>Earth Science</td>
<td>Political Science</td>
</tr>
<tr>
<td>Economics</td>
<td>Psychology</td>
</tr>
<tr>
<td>English</td>
<td>Social Work</td>
</tr>
<tr>
<td>French</td>
<td>Sociology</td>
</tr>
<tr>
<td>Geography</td>
<td>Spanish</td>
</tr>
</tbody>
</table>

Second (or dependent) Majors*

<table>
<thead>
<tr>
<th>African and African American Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Studies</td>
</tr>
<tr>
<td>European Studies</td>
</tr>
<tr>
<td>Latin American and Latino Studies</td>
</tr>
<tr>
<td>Middle East Studies</td>
</tr>
</tbody>
</table>

*A second (or dependent) major must be earned alongside a degree program in which the first major is one authorized to be given independently.

Minors

Academic minors in approved degree programs are options available to students in the Fulbright College of Arts and Sciences. The minor must be in a field other than the major, and students must notify the department of their intention to minor. An academic minor ordinarily consists of 15-18 hours. Specific requirements for the minor are given in the section entitled Departments, Majors, and Minors. Minors may be chosen from the following fields:

<table>
<thead>
<tr>
<th>African and African American Studies</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>Historic Preservation</td>
</tr>
<tr>
<td>Arabic</td>
<td>History</td>
</tr>
<tr>
<td>Art History</td>
<td>Japanese</td>
</tr>
<tr>
<td>Asian Studies</td>
<td>Latin American and Latino Studies</td>
</tr>
<tr>
<td>Biology</td>
<td>Legal Studies</td>
</tr>
<tr>
<td>Business</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Medieval and Renaissance Studies</td>
</tr>
<tr>
<td>Chinese</td>
<td>Middle East Studies</td>
</tr>
<tr>
<td>Classical Studies</td>
<td>Music</td>
</tr>
<tr>
<td>Communication</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Drama</td>
<td>Physics</td>
</tr>
<tr>
<td>Economics</td>
<td>Political Science</td>
</tr>
<tr>
<td>English</td>
<td>Psychology</td>
</tr>
<tr>
<td>European Studies</td>
<td>Religious Studies</td>
</tr>
<tr>
<td>French</td>
<td>Social Work</td>
</tr>
<tr>
<td>Gender Studies</td>
<td>Sociology</td>
</tr>
<tr>
<td>Geography</td>
<td>Spanish</td>
</tr>
<tr>
<td>Geology</td>
<td>Statistics</td>
</tr>
</tbody>
</table>

Fulbright College also recognizes all official minors offered by sister colleges at the University of Arkansas. Students wishing to have such minors made a part of their transcript must notify the Fulbright College dean’s office (MAIN 525) no later than when degree application is made.

OTHER PROGRAMS

Undergraduate Preparation for Professional Programs

The Fulbright College of Arts and Sciences offers courses that are required for the study of law, medicine, dentistry, teaching, pharmacy, social work, and other professions. It provides supporting programs in the humanities, fine arts, social sciences, and natural sciences for students who are enrolled for professional programs in other undergraduate colleges on the campus and for those students who may plan to enter postgraduate professional programs in other colleges.

In some instances it may be possible for a student to plan the use of undergraduate courses so that the time required for completion of a postgraduate professional program may be shortened by as much as one full year. Currently, this may be done for the Master of Social Work program. For information and advice concerning this program, see the Graduate Program Director of the School of Social Work.

In other pre-professional programs, the distribution of credits applied toward a degree in Fulbright College may require the consignment of a considerable portion of the available electives to prerequisite courses and to courses that are in direct support of the undergraduate major area.

Interested students should contact the appropriate advisers early in the planning of such programs.

Teacher Education Programs: Acceptance in a teacher education program is governed by regulations approved by the University Teacher Education Board for Initial Licensure and administered by the College of Education and Health Professions and the Fulbright College of Arts and Sciences. Students in Fulbright College can pursue teacher licensure in the following areas: Art, Drama/Speech, English, Foreign Languages, Mathematics, Music, Life/Earth Science, Physical/Earth Science, or Social Studies. Students in all subject areas, except Art and Music, must meet the entrance requirements for the Master of Arts in Teaching (M.A.T.) degree, which include completion of a baccalaureate degree in the subject area, completion of additional licensure requirements (if any) in subject area, completion of M.A.T. course requirements and a minimum 2.70 grade point average. See below for specific requirements in each subject area. Students intending to obtain teacher licensure in Art or Music will follow the education requirements set forth in the Bachelor of Fine Arts and Bachelor of Music degrees, respectively. For more information, please contact the Coordinator of Teacher Education in the College of Education.
and Health Professions, Peabody Hall, Room 8, and the Fulbright College Advising Center, Old Main, Room 518.

**Secondary Education Requirements for Fulbright College Students (except in Art and Music)**

1. All students must complete course requirements for entrance into the M.A.T. degree program. (All course requirements are subject to change. Students must meet current requirements at time of application for graduation.)
   
   Licensure for teaching requires completion of the bachelor's degree in Fulbright College and completion of the Master of Arts in Teaching (M.A.T.) degree through the College of Education and Health Professions. Admission to the M.A.T. degree program requires a minimum cumulative undergraduate grade-point average of 2.70 and completion of the following requirements. Refer to the teacher licensure checklist at coehp.uark.edu/4882.htm for licensing requirements and additional information. Complete the following with a grade of "C" or higher:
   
   a) CIED 4131, Practicum in Secondary Education
   b) Demonstration of computer competencies in a portfolio or:
      - ETEC 2001, Educational Technology and ETEC 2002L, Educational Technology Lab or another appropriately approved course
   c) CIED 4023, Teaching in Inclusive Secondary Settings

2. Complete subject area requirements. (See below for specific subject area requirements.)

**Drama/Speech**

Complete a BA degree with a major in Communications or Drama.

Communication majors must take the following Drama courses:

- DRAM 1223 Introduction to Dramatic Art
- DRAM 1683 Acting I
- DRAM 2683 Acting II
- DRAM 1313 and 1311L, Stage Technology I and lab
- DRAM 1323 and 1321L, Stage Technology II and lab
- DRAM 3653 Directing I

Drama majors must take the following Communication courses:

- COMM 2373 Introduction to Debate
- COMM 4793 Directing Forensics
- COMM 2303 Advanced Public Speaking
- COMM 2343 Introduction to Small-Group Communication

Students are advised to obtain an additional licensure area.

**English**

Complete a B.A. degree with a major in English.

Students are advised to obtain an additional licensure area.

**Foreign Languages**

Complete a BA degree in French, German or Spanish.

Pass Oral Proficiency Examination in French, German, Russian, and Spanish equivalent to Mid-Intermediate Rating on the ACTFL/ETS test (taken at end of senior year).

**Life/Earth Science**

Complete a BA or BS degree with a major in biology.

The following Earth Science courses are recommended for preparation of Praxis II content area:

- GEOG 1123 Human Geography
- SOCI 2013 General Sociology
- PLSC 2003 American National Government
- ECON 2143 Basic Economics or any other 3 hour credit ECON course
- HIST 4583 Arkansas in the Nation or HIST 3383 Arkansas and the Southwest

Note: HIST 3383 can also be taken by correspondence through the Department of Independent Study, Division of Continuing Education, or it can be taken web-based through the same office. Call them at (479) 575-3647 for further information if you are interested in the web-based class.

Admission to the School of Law is competitive. Any student admitted to the special six-year program must meet certain categories of courses that may be helpful to the study and practice of law. Students uncertain about a major degree program should contact the Fulbright College Advising Center.

By the end of senior year, any student enrolled in the J. William Fulbright College of Arts and Sciences during a fall semester shall be permitted to matriculate in the School of Law in the following fall semester if the admission complies with Section 1 of Part A of the law school's admission policies and if the student meets the following conditions:

1. At least 30 consecutive hours of course work in Fulbright College.
2. At least 94 hours credited toward a bachelor's degree by Fulbright College at the time of application for graduation.
3. At least 3.50, without grade renewal,
   - in the senior year,
   - to be included in the calculation of grade-point average for admission to the School of Law.

Any student enrolled in the J. William Fulbright College of Arts and Sciences during a spring semester shall be permitted to matriculate in the School of Law in the following fall semester if the admission complies with Section 1 of Part A of the law school's admission policies and if the student meets the following conditions:

1. At least 30 consecutive hours of course work in Fulbright College.
2. At least 94 hours credited toward a bachelor's degree by Fulbright College.
3. Completion of Fulbright College's requirements for a major in connection with the bachelor's degree,
4. A cumulative grade-point average in all college or University course work of at least 3.50, without grade renewal,
5. An LSAT score of at least 159.

A student may substitute law school course work for the remaining total hours required for the bachelor's degree from Fulbright College. Formal application for the degree should be made to the Registrar. Information about the program may be obtained in the dean's office or the Fulbright Advising Center.

**Mathematics**

Complete a B.A. or B.S. in mathematics.

**Physics/Earth Science**

Complete a BA or BS degree with a major in chemistry or physics.

The following Earth Science courses are recommended for preparation of Praxis II content area:

- GEOG 1113/1111L
- GEOG 1333/1331L
- ASTR 2003/2001L

**Social Studies**

Complete a BA degree in anthropology, economics, history, geography, political science, psychology, or sociology.

Complete these additional course requirements:

- ECON 2143 Basic Economics or any other 3 hour credit ECON course
- HIST 4583 Arkansas in the Nation or HIST 3383 Arkansas and the Southwest

The University of Arkansas School of Law at Fayetteville and the Fulbright College of Arts and Sciences jointly administer a six-year program whereby highly qualified students may earn both the bachelor's degree and the Juris Doctor degree. Students considering a career in law may consult the School of Law Catalog or the Fulbright College Advising Center for information concerning the special six-year program referred to in the paragraph immediately following. All applicants for admission are required to take the Law School Admission Test. (See page 281.)

The University of Arkansas School of Law at Fayetteville and the Fulbright College of Arts and Sciences jointly administer a six-year program whereby highly qualified students may earn both the bachelor's degree and the Juris Doctor degree. Students considering a career in law may consult the School of Law Catalog or the Fulbright College Advising Center for information concerning the special six-year program referred to in the paragraph immediately following. All applicants for admission are required to take the Law School Admission Test. (See page 281.)

Students are advised to obtain an additional licensure area.
<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Degrees Offered</th>
<th>Major</th>
<th>Minor</th>
<th>Concentration or Option</th>
<th>Coursework</th>
<th>Department/Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising and Public Relations</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Journalism</td>
<td>166</td>
</tr>
<tr>
<td>African and African American Studies</td>
<td>BA</td>
<td></td>
<td>X*</td>
<td></td>
<td></td>
<td>African and African American Studies</td>
<td>131</td>
</tr>
<tr>
<td>American Studies</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>American Studies</td>
<td>131</td>
</tr>
<tr>
<td>Anthropology</td>
<td>BA or BS</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Anthropology</td>
<td>133</td>
</tr>
<tr>
<td>Arabic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>World Languages, Literatures &amp; Cultures</td>
<td>195</td>
</tr>
<tr>
<td>Archeology</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Anthropology</td>
<td>133</td>
</tr>
<tr>
<td>Art</td>
<td>BA or BFA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art</td>
<td>135</td>
</tr>
<tr>
<td>Art Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art</td>
<td>135</td>
</tr>
<tr>
<td>Art History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art</td>
<td>135</td>
</tr>
<tr>
<td>Asian Studies</td>
<td>X*</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Asian Studies</td>
<td>139</td>
</tr>
<tr>
<td>Astronomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Physics</td>
<td>183</td>
</tr>
<tr>
<td>Biochemistry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chemistry &amp; Biochemistry</td>
<td>143</td>
</tr>
<tr>
<td>Biological Anthropology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anthropology</td>
<td>133</td>
</tr>
<tr>
<td>Biology</td>
<td>BA or BS</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Biological Sciences</td>
<td>139</td>
</tr>
<tr>
<td>Biophysical Chemistry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chemistry &amp; Biochemistry</td>
<td>143</td>
</tr>
<tr>
<td>Biophysics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Physics</td>
<td>183</td>
</tr>
<tr>
<td>Broadcast</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Journalism</td>
<td>166</td>
</tr>
<tr>
<td>Cartography/Remote Sensing/GIS specialization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Geosciences</td>
<td>158</td>
</tr>
<tr>
<td>Chemistry</td>
<td>BA or BS</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Chemistry &amp; Biochemistry</td>
<td>143</td>
</tr>
<tr>
<td>Chinese</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>World Languages, Literatures &amp; Cultures</td>
<td>195</td>
</tr>
<tr>
<td>Classical Studies</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Classical Studies</td>
<td>147</td>
</tr>
<tr>
<td>Communication</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Communication</td>
<td>148</td>
</tr>
<tr>
<td>Computational Physics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Physics</td>
<td>183</td>
</tr>
<tr>
<td>Creative Writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>English</td>
<td>154</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Sociology and Criminal Justice</td>
<td>197</td>
</tr>
<tr>
<td>Cultural Anthropology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Anthropology</td>
<td>133</td>
</tr>
<tr>
<td>Dance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Drama</td>
<td>151</td>
</tr>
<tr>
<td>Drama</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Drama</td>
<td>151</td>
</tr>
<tr>
<td>Earth Science</td>
<td>BS</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Geosciences</td>
<td>158</td>
</tr>
<tr>
<td>Economics</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Economics</td>
<td>152</td>
</tr>
<tr>
<td>Electronics-Physics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Physics</td>
<td>183</td>
</tr>
<tr>
<td>English</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>English</td>
<td>154</td>
</tr>
<tr>
<td>English/Journalism</td>
<td>BA</td>
<td></td>
<td>X*</td>
<td></td>
<td></td>
<td>Interdisciplinary</td>
<td>166</td>
</tr>
<tr>
<td>European Studies</td>
<td>BA</td>
<td></td>
<td>X*</td>
<td></td>
<td></td>
<td>European Studies</td>
<td>157</td>
</tr>
<tr>
<td>French</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>World Languages, Literatures &amp; Cultures</td>
<td>195</td>
</tr>
<tr>
<td>Gender Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gender Studies</td>
<td>158</td>
</tr>
<tr>
<td>Geography</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Geosciences</td>
<td>158</td>
</tr>
<tr>
<td>Geology</td>
<td>BS</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Geosciences</td>
<td>158</td>
</tr>
<tr>
<td>German</td>
<td>BA</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>World Languages, Literatures &amp; Cultures</td>
<td>195</td>
</tr>
</tbody>
</table>
### MAJORS, MINORS, CONCENTRATIONS AND COURSEWORK IN FULBRIGHT COLLEGE (cont.)

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Degrees Offered</th>
<th>Major</th>
<th>Minor</th>
<th>Concentration or Option</th>
<th>Coursework</th>
<th>Department/Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Preservation</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Geosciences</td>
<td>158</td>
</tr>
<tr>
<td>History</td>
<td>BA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>History</td>
<td>162</td>
</tr>
<tr>
<td>International Economics and Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Economics</td>
<td>152</td>
</tr>
<tr>
<td>International Relations</td>
<td>BA</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>International Relations</td>
<td>164</td>
</tr>
<tr>
<td>Japanese</td>
<td>BA</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>World Languages, Literatures &amp; Cultures</td>
<td>195</td>
</tr>
<tr>
<td>Journalism</td>
<td>BA</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Journalism</td>
<td>166</td>
</tr>
<tr>
<td>Journalism/Political Science</td>
<td>BA</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Interdisciplinary</td>
<td>166</td>
</tr>
<tr>
<td>Journalism/English</td>
<td>BA</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Interdisciplinary</td>
<td>166</td>
</tr>
<tr>
<td>Latin American and Latino Studies</td>
<td>BA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Latin American and Latino Studies</td>
<td>171</td>
</tr>
<tr>
<td>Legal Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Political Science</td>
<td>187</td>
</tr>
<tr>
<td>Mathematical Sciences</td>
<td>BA or BS</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Mathematical Sciences</td>
<td>172</td>
</tr>
<tr>
<td>Medieval and Renaissance Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Medieval Studies</td>
<td>176</td>
</tr>
<tr>
<td>Middle East Studies</td>
<td>BA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Middle East Studies</td>
<td>176</td>
</tr>
<tr>
<td>Music</td>
<td>BA or BM</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Music</td>
<td>177</td>
</tr>
<tr>
<td>Music Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Music</td>
<td>177</td>
</tr>
<tr>
<td>Music Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Music</td>
<td>177</td>
</tr>
<tr>
<td>Music Theory or Composition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Music</td>
<td>177</td>
</tr>
<tr>
<td>News/Editorial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Journalism</td>
<td>166</td>
</tr>
<tr>
<td>Optics-Physics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Physics</td>
<td>183</td>
</tr>
<tr>
<td>Philosophy</td>
<td>BA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Philosophy</td>
<td>182</td>
</tr>
<tr>
<td>Physics</td>
<td>BA or BS</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Physics</td>
<td>183</td>
</tr>
<tr>
<td>Political Science</td>
<td>BA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Political Science</td>
<td>187</td>
</tr>
<tr>
<td>Political Science/Journalism</td>
<td>BA</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Interdisciplinary</td>
<td>166</td>
</tr>
<tr>
<td>Professional Physics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Physics</td>
<td>183</td>
</tr>
<tr>
<td>Psychology</td>
<td>BA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Psychology</td>
<td>188</td>
</tr>
<tr>
<td>Regional Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>American Studies</td>
<td>131</td>
</tr>
<tr>
<td>Religious Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Religious Studies</td>
<td>190</td>
</tr>
<tr>
<td>Social Work</td>
<td>BSW</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Social Work</td>
<td>190</td>
</tr>
<tr>
<td>Sociology</td>
<td>BA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Sociology and Criminal Justice</td>
<td>193</td>
</tr>
<tr>
<td>Spanish</td>
<td>BA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>World Languages, Literatures &amp; Cultures</td>
<td>195</td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>Mathematical Sciences</td>
<td>172</td>
</tr>
<tr>
<td>Studio Art</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art</td>
<td>135</td>
</tr>
</tbody>
</table>

* Indicates majors that are “second,” “dependent,” or “combined.” See each program for more details.
Health Related Professions

Pre-Professional Programs:

<table>
<thead>
<tr>
<th>Program</th>
<th>Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiropractic</td>
<td>Ophthalmic Medical Technology</td>
</tr>
<tr>
<td>Cytotechnology</td>
<td>Optometry</td>
</tr>
<tr>
<td>Dental</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td>Diagnostic Medical Sonography</td>
<td>Physician Assistant</td>
</tr>
<tr>
<td>Medical</td>
<td>Podiatry</td>
</tr>
<tr>
<td>Medical Technology</td>
<td>Radiation Therapy</td>
</tr>
<tr>
<td>Nuclear Medicine Technology</td>
<td>Radiologic Technology</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>Respiratory Care</td>
</tr>
</tbody>
</table>

For additional information about these and other allied health professions, contact the Fulbright College Advising Center, 518 Old Main, 479-575-3307, or e-mail fac@uark.edu. Web site: fac.uark.edu. All preprofessional and allied health students are advised to research the school(s) where they intend to complete their professional or allied health program.

General: Each of the above areas involves the completion of a minimum number of semester hours and certain required courses. Many of the specific course requirements are common to all programs, and it is in the student's best interest to complete these requirements as early as possible. Careful scheduling is essential to ensure that courses are taken in proper sequence.

Pre-Chiropractic Program: Students entering this program should determine the specific admission requirements from the school(s) of their choice at an early date. Most chiropractic colleges require a minimum of 90 hours of college credit to include the following: 6 hours of English, 12 hours chemistry (with a minimum of 3 hours inorganic chemistry and at least 6 hours organic chemistry and/or biochemistry), 8 hours of biology, 3 hours of psychology, 15 hours of social science or humanities, and 8 hours of physics. All students planning careers in chiropractic should contact the Fulbright College Advising Center, 518 Old Main, 479-575-3307.

Pre-Dental Program: All dental schools require a minimum of three years of college work, and most schools give preference to applicants who have completed a baccalaureate degree. The minimum requirements for admission to most dental schools can be met at the University of Arkansas by completing the following courses:

- ENGL 1013, ENGL 1023 or equivalent composition course.
- BIOL 1543/1541L and at least 8 additional hours of biology (BIOI 1603/1601L is recommended).
- PHYS 2013/2011L, PHYS 2033/2031L, and CHEM 1103/1101L, CHEM 1123/1121L, CHEM 3603/3601L, CHEM 3613/3611L (CHEM 3813 Biochemistry is recommended or required by some schools).

CLEP and AP credit is not accepted. Dental schools have a variety of additional course requirements and pre-dental students should check each school's website.

Mathematics is not a general requirement, but students are expected to have a background equivalent to college algebra and trigonometry. Students who complete a minimum of 90 hours of work may qualify for the combined degree program provided that they complete the requirements for graduation in Fulbright College of Arts and Sciences.

All dental schools require the Dental Admissions Test. It is suggested that applicants take the DAT one year prior to the time they plan to enter dental school. A student planning a career in dentistry should contact Dr. J.C. Rose, Department of Anthropology, 479-575-2508.

Pre-Medical Program: Medical schools in general require a minimum of 90 semester hours of college credit exclusive of military science and physical education, and most recommend that the student complete a baccalaureate degree. All medical schools have specific course requirements, and the student should determine those requirements for the school or schools of his or her choice. The minimum requirements for most medical schools can be met by completion of the following courses:

- ENGL 1013, ENGL 1023, or equivalent
- BIOL 1543/1541L, plus one other course in biological sciences, or equivalent
- CHEM 1103/1101L, CHEM 1123/1121L, CHEM 3603/3601L, CHEM 3613/3611L
- MATH 1203 and MATH 1213, or MATH 2554
- PHYS 2013/2011L and PHYS 2033/2031L, or PHYS 2054 and PHYS 2074. CLEP credit is not accepted, and in some cases, AP credit for the required courses above is not accepted.

Additional courses are recommended. Special opportunities and experiences are available to pre-medical students through the Liebolt Premedical Program (http://premed.uark.edu).

Pre-medical students are encouraged to complete the requirements for the B.A. or B.S. degree. As part of these requirements the student must choose a major, but the choice of a major has no direct bearing upon admission to medical school and should reflect the particular interests of the student. If a student is admitted to a medical school prior to completion of the baccalaureate degree requirements, he/she may wish to take advantage of the combined degree program in medical science. If that program is elected, the student should complete all of the basic University and college requirements for graduation during residence on the UA campus.

Most medical schools require the Medical College Admissions Test (MCAT), which is administered at several testing sites in Arkansas on specific dates from January to September each year. The MCAT normally should be taken in the spring preceding application to medical school. Admission to medical school is highly competitive, and a good grade-point average is demanded. A grade-point average of 3.30 is the minimum likely to receive favorable consideration. A grade of “D” in any course required by the medical school is not considered satisfactory. Advising is available through Dr. Neil Allison, Department of Chemistry and Biochemistry, 479-575-5179, and Dr. Jeane McLachlin, Department of Biological Sciences, 479-575-5348. Dr. Allison serves as chair of the University of Arkansas Pre-medical Advisory Committee. For information, visit the University of Arkansas pre-medical website at http://premed.uark.edu.

Pre-Optometry Program: Admission requirements to schools of optometry are not uniform. Typically they include courses in English, mathematics, physics, chemistry, and biology. Some colleges and schools have specific requirements in psychology, social sciences, literature, philosophy, and foreign languages. Students in this program should determine the specific requirements from the college(s) they wish to attend at an early date and plan their program of study accordingly. Details concerning the program are available from the Fulbright College Advising Center, 479-575-3307, 518 Old Main.

Pre-Pharmacy Program: Entrance requirements for pharmacy schools vary; therefore, students should research the schools of their choice to determine specific prerequisite course work. The University of Arkansas for Medical Sciences College of Pharmacy requires 69 hours of pre-professional courses to include: 4 hours of calculus, 9 hours of English/Communication, 16 hours of chemistry, 12 hours of biology, 4 hours of physics, 3 hours of economics, 6 hours of critical thinking/problem solving, and 15 hours of humanities.

Students are advised to begin taking humanities electives during the second semester of their freshman year. Since pharmacy schools have many more applicants than they can accept, the student is urged to earn a grade-point average much higher than the minimum of 2.00.

Grades are a major consideration when admission committees evaluate a student’s qualifications for acceptance. The University of Arkansas College of Pharmacy and other pharmacy schools also require applicants to take the Pharmacy College Admissions Test (PCAT). This may be taken in November or February. The pre-pharmacy adviser for the University of Arkansas is Lorraine Brewer, Department of Chemistry and Biochemistry, 479-575-3103.

Pre-Podiatry Program: To meet entrance requirements for colleges of podiatry, an applicant must have completed a minimum of three years at an accredited undergraduate institution; however, most entering students have completed a baccalaureate degree. Courses required for admission vary with the college, and a student should inquire early in the academic program about the courses required for a particular institution. In general, a student is advised to include at least 8 hours of general chemistry, 8 hours of organic chemistry, 8 hours of physics, 8 hours of biology, and 6 hours of English. Additional information concerning requirements for specific colleges of podiatry may be obtained from the Fulbright College Advising Center, MAIN 518, 479-575-3307.

Pre-Cytotechnology Program: Admission requirements for cytotechnology
programs are not uniform. Typically they are bachelor-level programs requiring prerequisite coursework in English, mathematics, chemistry, biology, psychology and/or sociology along other general education areas. Students in this program should determine the specific requirements from the program(s) they wish to attend at an early date and work with a preprofessional adviser to plan their program of study accordingly. Details concerning the program are available from the Fulbright College Advising Center, 479-575-3307, 518 Old Main.

Pre-Dental Hygiene Program: Admission requirements for dental hygiene programs are not uniform. Typically they are associate- or bachelor-level programs requiring prerequisite coursework in English, mathematics, physics, chemistry, biology, psychology and/or sociology along other general education areas. Students in this program should determine the specific requirements from the program(s) they wish to attend at an early date and work with a preprofessional adviser to plan their program of study accordingly. Details concerning the program are available from the Fulbright College Advising Center, 479-575-3307, 518 Old Main.

Pre-Diagnostic Medical Sonography Program: Admission requirements for sonography programs are not uniform. Typically they are associate- or bachelor-level programs requiring prerequisite coursework in English, mathematics, physics, chemistry, biology, psychology and/or sociology along other general education areas. Students in this program should determine the specific requirements from the program(s) they wish to attend at an early date and work with a preprofessional adviser to plan their program of study accordingly. Details concerning the program are available from the College Advising Center, 479-575-3307, 518 Old Main.

Pre-Medical Technology Program: Admission requirements for medical technology programs are not uniform. Typically they are bachelor-level programs requiring prerequisite coursework in English, mathematics, physics, chemistry, biology, psychology and/or sociology along other general education areas. Students in this program should determine the specific requirements from the program(s) they wish to attend at an early date and work with a preprofessional adviser to plan their program of study accordingly. Details concerning the program are available from the Fulbright College Advising Center, 479-575-3307, 518 Old Main.

Pre-Nuclear Medicine Imaging Sciences Program: Admission requirements for nuclear medicine imaging programs are not uniform. Typically they are bachelor-level programs requiring prerequisite coursework in English, mathematics, physics, chemistry, biology, psychology and/or sociology along other general education areas. Students in this program should determine the specific requirements from the program(s) they wish to attend at an early date and work with a preprofessional adviser to plan their program of study accordingly. Details concerning the program are available from the College Advising Center, 479-575-3307, 518 Old Main.

Pre-Occupational Therapy Program: Admission requirements for occupational therapy programs are not uniform. Typically they are master-level programs requiring a bachelor's degree that includes prerequisite coursework in English, mathematics, physics, chemistry, biology, psychology and/or sociology along other general education areas. Some programs allow students who do not yet have a bachelor's degree but have completed all required prerequisite coursework. Students in this program should determine the specific requirements from the program(s) they wish to attend at an early date and work with a preprofessional adviser to plan their program of study accordingly. Details concerning the program are available from the Fulbright College Advising Center, 479-575-3307, 518 Old Main.

Pre-Ophthalmic Medical Technology Program: Admission requirements for ophthalmic medical technology programs are not uniform. Typically they are bachelor-level programs requiring prerequisite coursework in English, mathematics, physics, chemistry, biology, psychology and/or sociology along other general education areas. Students in this program should determine the specific requirements from the program(s) they wish to attend at an early date and work with a preprofessional adviser to plan their program of study accordingly. Details concerning the program are available from the College Advising Center, 479-575-3307, 518 Old Main.

Cooperative Education

The Cooperative Education program is designed to offer students an opportunity to participate in a work experience directly related to their academic major. The program also insists that at least minimal academic credit be awarded, thus ensuring that the work experience will be directly related to the student's academic program. Cooperative Education offers advantages to students needing assistance in financing their education, and it offers the college a tangible way to demonstrate our conviction that although we do not stress vocational or professional training per se, there is nothing imbalanced between a liberal arts education and the world of work. Prerequisites include 45 credit hours, a cumulative GPA of 2.50, and consent of the academic coordinator. A maximum of 4 credit hours of ARSC 310V (Cooperative Education) may be applied toward the student's degree.

Details information about Cooperative Education may be obtained from the Office of the Dean, Fulbright College, 525 Old Main.

COLLEGE ADMISSION REQUIREMENTS

Students seeking admission to the J. William Fulbright College of Arts and Sciences must meet the general requirements for admission to the University. In addition, students are expected to present two units (years) of a single modern foreign or classical language. Those unable to meet this standard will be expected to begin their collegiate foreign language study as soon as possible after matriculation. For these students, the first semester of language study will be considered to satisfy the admission deficiency and will not count toward the 124 hours required for graduation (although the course will appear as University credit, and the grade received will be computed in the grade-point average). For the students who meet the Fulbright College of Arts and Sciences admission requirements and continue with the same foreign language taken in high school, the first semester of language study will be considered remedial and will not count toward the 124
hours required for graduation (although the course will appear as University credit and the grade received will be computed in the grade-point average). Students transferring from other colleges at the University of Arkansas or from other institutions are expected to meet the same entrance standard.

COLLEGE SCHOLARSHIPS

Foremost among scholarships available in the J. William Fulbright College of Arts and Sciences is the Sturgis Fellowship. This scholarship enables Fulbright College to offer outstanding graduates of secondary and preparatory schools undergraduate fellowships valued at $50,000 for four collegiate years.

Students studying in the humanities or classics may qualify for the J. William and Elizabeth W. Fulbright Scholarship for study abroad. This award is for students who are at least juniors and is intended to support a year of study abroad.

The King Fahd Center for Middle East Studies offers two-year undergraduate scholarships for superior students interested in pursuing the study of the Middle East or Islam.

In addition, students may compete for a number of privately endowed scholarships, which are awarded on a competitive basis to those who qualify. Application for these general Fulbright College scholarships and awards is made through the Office of the Dean, 525 Old Main. Students may obtain more detailed information about the above-named scholarships and other Fulbright College scholarships at http://fulbright.uark.edu/scholarships/index.php.

Other scholarships are available from the departments of Fulbright College. Information may be sought from the departmental chair of the student's major.

STUDENT ORGANIZATIONS

There are many general-interest societies and organizations to which students may belong, and nearly every department of the University maintains an honor society through which high scholarship is rewarded. Students in Fulbright College may aspire to membership in the following organizations:

- Alpha Chi Sigma (chemistry)
- Alpha Epsilon Delta (pre-medical, medical technology, pre-dental)
- Alpha Kappa Delta (sociology)
- Alpha Phi Sigma (criminal justice)
- Alpha Psi Omega (drama)
- American Chemical Society (chemistry)
- Delta Phi Alpha (German)
- Eta Sigma Phi (Greek and Latin)
- Gamma Theta Upsilon (geography)
- Kappa Kappa Psi (band, men)
- Kappa Tau Alpha (journalism)
- Lambda Alpha (anthropology)
- Lambda Pi Eta (communication)
- Lambda Tau (writers)
- Omicron Delta Epsilon (economics)
- Phi Alpha (social work)
- Phi Alpha Theta (history)
- Phi Beta Delta (international scholarship)
- Phi Beta Kappa (arts and sciences)
- Phi Kappa Phi
- Phi Mu Alpha (music, men)
- Pi Kappa Delta (forensics)
- Pi Mu Epsilon (mathematics)
- Pi Sigma Alpha (political science)
- Psi Chi (psychology)
- Sigma Alpha Iota (music, women)
- Sigma Delta Pi (Spanish)
- Sigma Gamma Epsilon (geology)
- Sigma Pi Sigma (physics)
- Tau Beta Sigma (band, women)

---

COLLEGE ACADEMIC REGULATIONS

Courses of study in the Fulbright College of Arts and Sciences are designed to give students the comprehensive view of society that the modern world requires. Students who enroll in Fulbright College, or who elect some of its courses, have an opportunity to gain a broad cultural education, which is a part of intelligent living and, at the same time, to prepare for professions or to acquire technical training in the sciences. The college has two major teaching functions: to provide basic general education in the arts and sciences necessary to all persons for effective participation in the complex world in which we live; and, second, to furnish the student an opportunity to specialize in the field of the student's choice.

To implement the first of these aims and to furnish a broad base for the accomplishment of the second, the faculty of Fulbright College has adopted the requirements listed below for each degree.

Specific course requirements may be fulfilled in one of four ways:

1. Establishing credit in approved courses:
   a. by enrolling in and completing the required work in the course,
   b. by examination (credit will be entered as CR on a student’s record as explained in Advanced-Standing Programs, page 43),
   c. by advanced achievement, i.e., by satisfactory completion of a more advanced course of a sequence. For example, students who earn a grade of “C” or better in a third-semester foreign language course may be granted credit for the second semester course upon recommendation of the Foreign Language Department and approval by the Dean of the college. (This does not apply to work taken by correspondence or in transfer.)

2. Gaining exemption by examination. Announced exemption examinations are routinely offered in several courses. Students may consult any department or the dean’s office concerning exemption examinations.

3. Advanced placement by examination. A student who is granted advanced placement may elect to substitute a more advanced course for the listed required course.

4. Transfer credit. Students presenting transfer credit in lieu of stated requirements may be asked to present official course descriptions, etc. Transfer work with grades of “D” or “F” will not be accepted.

DEGREE COMPLETION PROGRAM POLICY

Fulbright College of Arts and Sciences Graduation Requirements

In addition to the specific course requirements for the degree plan and major, be aware that there are general graduation requirements that every student in Fulbright College must complete.

1. Minimum Total Semester Hour Requirement
   B.A., B.M., B.S. and B.S.W. Degrees: 124 hours
   B.F.A.: 128 hours

2. Residency Requirement
   a. University Residency (Enrollment) Requirement
      Students must earn a minimum of 30 semester hours at the University of Arkansas, Fayetteville campus – this includes UA faculty-led study abroad classes, online/on-campus classes, and Global Campus courses; and all other courses paid towards Fayetteville campus tuition and fees. These 30 semester hours are to be upper-division semester hours required for the completion of a degree program. Additional hours in residence can be required for completing a minor. Hours earned in another school or college at UA, Fayetteville, may be used to satisfy this requirement with approval of appropriate faculty curriculum committee.
   b. College Residency Requirement and 24 Hour Rule
      A student graduating from Fulbright College must have completed at least 30 hours of credit in courses offered by Fulbright College, at least 24 of which must be 3000 and 4000 level courses from departments in Fulbright College.
3. 40-Hour Rule
Students must present for degree credit at least 40 hours of work in courses numbered 3000 and above. Included in these 40 hours can be courses numbered 2000 if each has a specific course designated as a prerequisite. It is highly recommended that students complete all 40 hours in courses numbered 3000 and higher. These courses may be taken from other colleges or universities as long as the college residency requirement and the 24-hour rule are satisfied.

4. Grade-Point Average
Students graduating from Fulbright College must have a minimum cumulative GPA of 2.00.

5. “D”- Rule
If a student has grades of “D” in more than 25 percent of the hours presented for graduation credit, she/he will not be allowed to graduate.

6. 68-Hour Rule
Students who transfer into the University may present for degree credit no more than 68 hours of lower division course work (1000 and 2000 level).

7. Writing Requirement
Students graduating from Fulbright College must write a research/analytical paper for at least one upper-division course in his or her major. Each department has determined its own procedures for certifying completion of this requirement. Questions should be referred to the departmental chairperson. A student may choose to write a senior thesis in a major area of study. The thesis may be accorded up to six hours of credit. Defense of the thesis before a committee is required. Satisfactory completion of an honors project or a senior thesis may be submitted to meet the college writing requirement.

8. Students must complete the stated requirements for a Bachelor of Science degree provided that the student's adviser or to the dean's office, which will maintain current lists of approved courses, experimental offerings approved to fulfill requirements for a specified period of time, examination schedules, and other options available to the student.

Fulbright College Senior Scholar: A student who has earned at least 50 percent of his or her college credits at the University of Arkansas and has maintained a grade-point average of at least 3.80 through the semester preceding graduation shall earn the distinction of “Fulbright College Senior Scholar.” In addition to completing one of the following requirements, a student must successfully complete the honors core curriculum, maintain a minimum grade-point average of 3.5, and take 12 hours (which may include six hours of thesis) in Honors studies. If a student demonstrates superior academic performance or an exceptionally high level of scholarly activity, the Honors Council may award the higher distinctions of Cum Laude, Magna Cum Laude, or Summa Cum Laude based upon a student's total academic performance, including the academic transcript, the quality of the scholarly activity pursued within the major field of study, and the breadth of college study as a whole.

Combined Academic and Medical or Dental Degree
Fulbright College offers a Bachelor of Science degree in medical science or medical science (dentistry). A student may substitute the first year of regular medical or dental work taken in any standard, approved medical or dental school for 33 hours of the total required for the Bachelor of Science degree provided that the following requirements are met:

1. Completion of all core requirements for a B.S. degree, as appropriate, prior to student's entrance in medical or dental school.
2. Completion of a minimum of 12 hours of courses numbered above 3000 taken in Fulbright College.
3. Completion of at least 30 hours immediately prior to student's entrance in medical or dental school in residence in Fulbright College.

Students interested in this degree should consult with their adviser or with the Fulbright College dean’s office early in their program. Formal application for the degree should be made to the Registrar.

This program is for highly qualified students with outstanding academic records who may be eligible for early admission to medical school or dental school programs. The year of a medical or dental study substitutes for the major in the B.S. degree program.

Additional Majors
Students fulfilling all requirements for the B.S., B.S.W., B.F.A. and B.M. degrees, including all core requirements and at least one major in these degree programs, may also claim an additional major in a humanistic discipline, social science, or interdisciplinary program associated with a BA degree. Upon completing all major requirements for that discipline, students wishing to have an additional major will not also receive a BA degree, but the additional major will be made part of their transcript. Students interested in this option should consult regularly with an academic adviser in the additional major and must notify the Fulbright College dean’s office (MAIN 525) when degree application is made.

HONORS PROGRAM
To create an intellectual environment that challenges the best of students, the J. William Fulbright College of Arts and Sciences provides a comprehensive program of Honors Studies. This includes the Fulbright College Scholars Program, a four-year interdisciplinary honors program for students of superior academic ability or artistic talent, and the Departmental Honors Program, an honors program emphasizing directed independent study within a department or discipline of the college.

For admission into the Fulbright Honors Program, an incoming student must have at least a 3.5 high school grade point average and a minimum ACT composite score of 28 or 1240 SAT. A current Fulbright College student must have a University of Arkansas grade point average of 3.5 or above and a faculty recommendation from the department of study.

A student who successfully completes a program of Honors Studies within Fulbright College is eligible to receive a baccalaureate degree with the distinction Fulbright College Scholar Cum Laude, or Departmental Scholar Cum Laude in the major field of study. Higher distinctions of Magna Cum Laude or Summa Cum Laude may be awarded to outstanding honors students by recommendation of the Fulbright College Honors Council.

To earn the distinction Fulbright College Scholar Cum Laude at graduation, a student must successfully complete the honors core curriculum, maintain a minimum grade-point average of 3.5, and satisfy requirements for departmental honors in the major field of study, including preparation and oral defense of an honors thesis. The Honors Council may award the higher distinctions of Magna Cum Laude or Summa Cum Laude based upon a student's total academic performance, including the academic transcript, the quality of the scholarly activity pursued within the major field of study, and the breadth of college study as a whole.

To earn the distinction of Departmental Scholar Cum Laude at graduation, a student must successfully complete requirements prescribed by the major department, including an honors thesis and oral examination, maintain a minimum grade-point average of 3.5, and take 12 hours (which may include six hours of thesis) in Honors Studies. If a student demonstrates superior academic performance or an exceptionally high level of scholarly activity, the Honors Council may award the distinction of Magna Cum Laude. In exceptional instances where truly outstanding work within the major field is coupled with the superior understanding of its relationship to the college work as a whole, the distinction Summa Cum Laude may be awarded.

For more information about Honors Studies within Fulbright College, visit the web site at www.uark.edu/honors.

Degrees with Honors
The J. William Fulbright College of Arts and Sciences is dedicated to providing students a liberal education in the arts, humanities, and sciences. Such an education should be soundly based, innovative, and enriched by a creative faculty. This is especially true for students with superior academic ability or artistic talent. To achieve these aims, the college faculty has developed and participates in the Fulbright College Scholars Program and the Departmental Honors Program.

Requirements for the Fulbright College Scholars Program: Credit or exemption for University Core in English composition, including ENGL 1013, ENGL 1023, and ENGL 2003, and in American history or American government, completion of the requirements for departmental honors in a department or study area of the college, including preparation and oral defense of an honors thesis, a cumulative grade-point average of 3.5 or above, and completion of the honors core
Students who do not have at least a 3.5 GPA will not be allowed to graduate with honors.

Requirements for Departmental Honors: Specific academic requirements including course work, participation in departmental honors colloquia or seminars, and independent study projects are established by the faculty of the individual departments or study areas and are approved by the Honors Council. However, all departmental honors students must have a 3.5 cumulative grade-point average, complete and defend an honors thesis, and take 12 hours (which may include six hours of thesis) in Honors Studies. Information concerning these requirements is given within each department’s catalog listings.

The minimum academic requirements of the honors core curriculum for the B.A./B.S.W., B.S., B.M., and B.F.A. degree programs can be found in the degree requirements for each program listed below.

## Honors Core Curriculum

### Bachelor of Arts or Bachelor of Social Work Degree

Requirements for Departmental Honors: Specific academic requirements including course work, participation in departmental honors colloquia or seminars, and independent study projects are established by the faculty of the individual departments or study areas and are approved by the Honors Council. However, all departmental honors students must have a 3.5 cumulative grade-point average, complete and defend an honors thesis, and take 12 hours (which may include six hours of thesis) in Honors Studies. Information concerning these requirements is given within each department’s catalog listings.

The following outlines the minimum academic requirements of the honors core curriculum for the B.A. and B.S.W. degree programs.

### Honors Core Curriculum

<table>
<thead>
<tr>
<th>Humanities and Social Sciences Option 1</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core – 27 hours; 15 hours must be at honors level</td>
<td></td>
</tr>
<tr>
<td>World Civilization</td>
<td>6</td>
</tr>
<tr>
<td>- HIST 1113H or 1113 World Civilization I</td>
<td></td>
</tr>
<tr>
<td>- HIST 1123H or 1123 World Civilization II</td>
<td></td>
</tr>
<tr>
<td>World Literature</td>
<td>6</td>
</tr>
<tr>
<td>- WLIT 1113H or 1113 World Literature I and</td>
<td></td>
</tr>
<tr>
<td>- WLIT 1123H or 1123 World Literature II or foreign language</td>
<td></td>
</tr>
<tr>
<td>- literature course, any other WLIT course, CLST 1003 or</td>
<td></td>
</tr>
<tr>
<td>- CLST 1013</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>- PHIL 2003H or 2003 Intro to Philosophy</td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td>6</td>
</tr>
<tr>
<td>- ARCH 1003H or 1003 Architecture Lecture</td>
<td></td>
</tr>
<tr>
<td>- ARHS 1003H or 1003 Art Lecture</td>
<td></td>
</tr>
<tr>
<td>- COMM 1003H or 1003 Film Lecture</td>
<td></td>
</tr>
<tr>
<td>- DANC 1003H or 1003 Introduction to Dance</td>
<td></td>
</tr>
<tr>
<td>- DRAM 1003 or 1003 Theater Lecture</td>
<td></td>
</tr>
<tr>
<td>- MLIT 1003H or 1003 Music Literature</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>- ANTH 1023H or 1023 Cultural Anthropology</td>
<td></td>
</tr>
<tr>
<td>- GEOG 2003 World Regional Geography</td>
<td></td>
</tr>
<tr>
<td>- ECON 2013H or 2013 Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>- ECON 2023H or 2023 Microeconomics</td>
<td></td>
</tr>
<tr>
<td>- PSYC 2003H or 2003 General Psychology (required for B.S.W. Social Work majors)</td>
<td></td>
</tr>
<tr>
<td>- SOCI 2013H or 2013 General Sociology (required for B.S.W. Social Work majors)</td>
<td></td>
</tr>
</tbody>
</table>

### Humanities and Social Sciences Option 2

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core – 15-16 hours; 8 hours must be at honors level</td>
</tr>
<tr>
<td>Social Science Colloquium</td>
</tr>
<tr>
<td>Humanities Colloquium</td>
</tr>
<tr>
<td>Social Science Colloquium</td>
</tr>
<tr>
<td>Natural Science or Math Colloquium</td>
</tr>
<tr>
<td>Foreign Language: (depending upon placement) See your adviser.</td>
</tr>
<tr>
<td>Students must demonstrate proficiency in a single modern or classical language other than English, usually by completing a sequence of four courses (1003, 1013, 2003, 2013).</td>
</tr>
<tr>
<td>See Fulbright College Admission Requirements (page 129).</td>
</tr>
<tr>
<td>Students meeting the normal admission standard (two years of high school language) may expect to satisfy this requirement with fewer courses, depending upon placement. In cases of unusually thorough preparation, or in the case of international students, exemption may be sought from the department of foreign languages.</td>
</tr>
<tr>
<td>Natural Science and Mathematics</td>
</tr>
<tr>
<td>Core – At least 4 hours must be chosen from biological and 4 hours from physical</td>
</tr>
<tr>
<td>Biological Sciences</td>
</tr>
<tr>
<td>- ANTH 1013/1011M or 1013/1011L Intro to Biological Anthropology</td>
</tr>
<tr>
<td>- BIOL 1543/1541M or 1543/1541L Principles of Biology</td>
</tr>
<tr>
<td>- BIOL 1603/1601M or 1603/1601L Principles of Zoology</td>
</tr>
<tr>
<td>- BIOL 1613/1611M or 1613/1611L Plant Biology</td>
</tr>
<tr>
<td>- BIOL 2013/2011M or 2013/2011L General Microbiology</td>
</tr>
<tr>
<td>Physical Sciences</td>
</tr>
<tr>
<td>- ASTR 2003H/2001M or 2003/2001L Survey of the Universe</td>
</tr>
<tr>
<td>- CHEM 1103/1101L University Chemistry I</td>
</tr>
<tr>
<td>- CHEM 1123H/1121M or 1123/1121L University Chemistry II</td>
</tr>
<tr>
<td>- GEOI 1113H/1111M or 1113/1111L General Geology</td>
</tr>
<tr>
<td>- GEOI 1133/1131L Environmental Geology</td>
</tr>
<tr>
<td>- PHYS 1023H/1021M or 1023/1021L Physics and Human Affairs</td>
</tr>
<tr>
<td>- PHYS 2054H/(M) or 2054/(L) University Physics I</td>
</tr>
<tr>
<td>- PHYS 2074H/(M) or 2074/(L) University Physics II</td>
</tr>
<tr>
<td>Mathematics</td>
</tr>
<tr>
<td>- MATH 2033 Mathematics in Society or MATH 2033/2031M</td>
</tr>
<tr>
<td>- MATH 2043 Survey of Calculus</td>
</tr>
<tr>
<td>- MATH 2053 Finite Math</td>
</tr>
<tr>
<td>- MATH 2183 Mathematical Reasoning</td>
</tr>
<tr>
<td>- MATH 2554H or 2554 Calculus I</td>
</tr>
<tr>
<td>- MATH 2564H or 2564 Calculus II</td>
</tr>
<tr>
<td>- MATH 2574H or 2574 Calculus III</td>
</tr>
</tbody>
</table>
Bachelor of Science Degree

Requirements for Departmental Honors: Specific academic requirements including course work, participation in departmental honors colloquia or seminars, and independent study projects are established by the faculty of the individual departments or study areas and are approved by the Honors Council. However, all departmental honors students must have a 3.5 cumulative grade-point average, complete and defend an honors thesis, and take 12 hours (which may include six hours of thesis) in Honors Studies. Information concerning these requirements is given within each department's catalog listings.

The following outlines the minimum academic requirements of the honors core curriculum for the B.S degree program.

<table>
<thead>
<tr>
<th>Honors Core Curriculum</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Humanities and Social Sciences Option 1</strong></td>
<td></td>
</tr>
<tr>
<td>Core – 18 hours; 9 hours must be at honors level</td>
<td></td>
</tr>
<tr>
<td>World Civilization</td>
<td>6</td>
</tr>
<tr>
<td>HIST 1113H or 1113 World Civilization I</td>
<td></td>
</tr>
<tr>
<td>HIST 1123H or 1123 World Civilization II</td>
<td></td>
</tr>
<tr>
<td>Fine Arts/World Literature/Philosophy</td>
<td>9</td>
</tr>
<tr>
<td>Must be selected from two different areas.</td>
<td></td>
</tr>
<tr>
<td><strong>Fine Arts</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 1003H or 1003 Architecture Lecture</td>
<td></td>
</tr>
<tr>
<td>ARHS 1003H or 1003 Art Lecture</td>
<td></td>
</tr>
<tr>
<td>COMM 1003H or 1003 Film Lecture</td>
<td></td>
</tr>
<tr>
<td>DANC 1003H or 1003 Intro to Dance</td>
<td></td>
</tr>
<tr>
<td>DRAM 1003H or 1003 Theater Lecture</td>
<td></td>
</tr>
<tr>
<td>MLIT 1003H or 1003 Music Lecture</td>
<td></td>
</tr>
<tr>
<td><strong>World Literature</strong></td>
<td></td>
</tr>
<tr>
<td>WLIT 1113H or 1113 World Literature I</td>
<td></td>
</tr>
<tr>
<td>WLIT 1123H or 1123 World Literature II or foreign language literature course</td>
<td>6</td>
</tr>
<tr>
<td>any other WLIT course, CLST 1003 or CLST 1013</td>
<td></td>
</tr>
<tr>
<td><strong>Philosophy</strong></td>
<td></td>
</tr>
<tr>
<td>PHIL 2003H or 2003 Introduction to Philosophy</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
</tr>
<tr>
<td>ANTH 1023H or 1023 Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2013H or 2013 Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 2023H or 2023 Microeconomics</td>
<td></td>
</tr>
<tr>
<td>GEOG 2003 World Regional Geography</td>
<td></td>
</tr>
<tr>
<td>PSYC 2003H or 2003 General Psychology</td>
<td></td>
</tr>
<tr>
<td>SOCI 213H or 2013 General Sociology</td>
<td></td>
</tr>
<tr>
<td><strong>Humanities and Social Sciences Option 2</strong></td>
<td></td>
</tr>
<tr>
<td>Core – 18 hours; 9 hours must be at honors level</td>
<td></td>
</tr>
<tr>
<td>HUMN 1114H, HUMN 1124H, HUMN 2114H</td>
<td>12</td>
</tr>
<tr>
<td>Humanities/Fine Arts/World Literature/Philosophy</td>
<td></td>
</tr>
<tr>
<td>Must select one course from humanities, fine arts, world literature or philosophy:</td>
<td></td>
</tr>
<tr>
<td><strong>Humanities</strong></td>
<td>3</td>
</tr>
<tr>
<td>HUMN 2124H</td>
<td></td>
</tr>
<tr>
<td><strong>Fine Arts</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 1003H or 1003 Architecture Lecture</td>
<td></td>
</tr>
<tr>
<td>ARHS 1003H or 1003 Art Lecture</td>
<td></td>
</tr>
<tr>
<td>COMM 1003H or 1003 Film Lecture</td>
<td></td>
</tr>
<tr>
<td>DANC 1003H or 1003 Intro to Dance</td>
<td></td>
</tr>
<tr>
<td>DRAM 1003H or 1003 Theater Lecture</td>
<td></td>
</tr>
<tr>
<td>MLIT 1003H or 1003 Music Lecture</td>
<td></td>
</tr>
<tr>
<td><strong>World Literature</strong></td>
<td></td>
</tr>
<tr>
<td>WLIT 1123H or 1123 World Literature II or foreign language literature course</td>
<td></td>
</tr>
<tr>
<td>any other WLIT course, CLST 1003 or CLST 1013</td>
<td>9</td>
</tr>
<tr>
<td><strong>Philosophy</strong></td>
<td></td>
</tr>
<tr>
<td>PHIL 2003H or 2003 Introduction to Philosophy</td>
<td></td>
</tr>
</tbody>
</table>

Social Sciences
- ANTH 1023H or 1023 Cultural Anthropology
- ECON 2013H or 2013 Macroeconomics
- ECON 2023H or 2023 Microeconomics
- GEOG 2003 World Regional Geography
- PSYC 2003H or 2003 General Psychology
- SOCI 213H or 2013 General Sociology

Students pursuing either option must also complete the following:
- Honors Colloquium (one from each approved area): 9
  - Humanities Colloquium
  - Social Science Colloquium
  - Natural Science or Math Colloquium
- Natural Sciences
  - Area 1
    - ASTR 2003H/2001M Survey of the Universe
    - PHYS 2054H/2054H(M) University Physics I
    - PHYS 2074H/2074H(M) University Physics II
  - Area 2
    - BIOL 1543/1541M Principles of Biology
    - BIOL 1603/1601M Principles of Zoology
    - BIOL 1613/1611M Plant Biology
    - BIOL 203/2011M General Microbiology
  - Area 3
    - CHEM 1103/1101L University Chemistry I
    - CHEM 1123H/1121M University Chemistry II
    - CHEM 1213/1211L Chemistry I for Majors
    - CHEM 1223/1221L Chemistry II for Majors
    - CHEM 3603H/3602M Organic Chemistry I
    - CHEM 3613H/3612M Organic Chemistry II
  - Area 4
    - GEOL 1113H/1111M General Geology
    - GEOL 1133/1131L Environmental Geology
- Mathematics
  - Area 5
    - MATH 254H or 2554 Calculus I
    - MATH 2564H or 2564 Calculus II
    - MATH 2574H or 2574 Calculus III
- Foreign Language: (depending upon placement) 0-9
  - See your adviser. Students must demonstrate proficiency in a single modern or classical language other than English, usually by completing a sequence of three courses (1003, 1013, 2003). Students meeting the normal admission standard (two years of high school language) may expect to satisfy this requirement with fewer courses, depending upon placement. In cases of unusually thorough preparation, or in the case of international students, exemption may be sought from the department of foreign languages.

Bachelor of Music Degree

Requirements for Departmental Honors: Specific academic requirements including course work, participation in departmental honors colloquia or seminars, and independent study projects are established by the faculty of the individual departments or study areas and are approved by the Honors Council.

However, all departmental honors students must have a 3.5 cumulative grade-point average, complete and defend an honors thesis, and take 12 hours (which may include six hours of thesis) in Honors Studies. Information concerning these requirements is given within each department's catalog listings.
The following outlines the minimum academic requirements of the honors core curriculum for the B.FA. degree program.

### Honors Core Curriculum

#### Humanities Option 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Civilization</td>
<td>6</td>
</tr>
<tr>
<td>HIST 1113H, HIST 1123H</td>
<td></td>
</tr>
<tr>
<td>World Literature</td>
<td>3</td>
</tr>
<tr>
<td>WLIT 1113H</td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>MLIT 1013H</td>
<td></td>
</tr>
<tr>
<td>Colloquium in Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course offerings vary each semester.**

#### Humanities Option 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors Roots of Culture</td>
<td>12</td>
</tr>
<tr>
<td>HUMN 1114H, HUMN 1124H, HUMN 2114H</td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>MLIT 1013H</td>
<td></td>
</tr>
<tr>
<td>Colloquium in Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

**Students pursuing Humanities Option 2 who complete the fourth semester of Honors Roots Culture (HUMN 2124H) will receive a 3-hour waiver for the Humanities Colloquium requirement. Otherwise, they must choose course work from the humanities colloquia course listing. Course offerings vary each semester.**

#### Students pursuing either option must also complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Language (depending upon placement)</td>
<td>0-9</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Select from the following: ANTH 1023H, GEOG 2103H, ECON 2013H, ECON 2023H, ECON 2013 and ECON 2023, PSYC 2003H, SOCI 2013H</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>8</td>
</tr>
<tr>
<td>Eight hours of honors credit to be chosen from the lab sciences. See adviser for specific science course listing.</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3-4</td>
</tr>
<tr>
<td>Fulbright Scholars must fulfill the math requirement of MATH 2043 or MATH 2053 or MATH 2183 or MATH 2554.</td>
<td></td>
</tr>
</tbody>
</table>

### Bachelor of Fine Arts Degree

Specific academic requirements including course work, participation in departmental honors colloquia or seminars, and independent study projects are established by the faculty of the individual departments or study areas and are approved by the Honors Council. However, all departmental honors students must have a 3.5 cumulative grade-point average, complete and defend an honors thesis, and take 12 hours (which may include six hours of thesis) in Honors Studies. Information concerning these requirements is given within each department’s catalog listings.

The following outlines the minimum academic requirements of the honors core curriculum for the B.FA. degree program.

#### Honors Core Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Civilization</td>
<td>6</td>
</tr>
<tr>
<td>HIST 1113H, HIST 1123H</td>
<td></td>
</tr>
<tr>
<td>World Literature</td>
<td>3</td>
</tr>
<tr>
<td>WLIT 1113H</td>
<td></td>
</tr>
<tr>
<td>Fine Arts, World Literature II, and Philosophy</td>
<td>6</td>
</tr>
</tbody>
</table>

**Must be selected from two different areas.**

---

**Fine Arts**

- COMM 1003H, DANC 1003H, DRAM 1003H, MLIT 1003H
- Philosophy
- PHIL 2003H
- World Literature II
- WLIT 1123H

**Colloquium in Humanities**

- Course offerings vary each semester.

#### Humanities Option 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors Roots of Culture</td>
<td>12</td>
</tr>
<tr>
<td>HUMN 1114H, HUMN 1124H, HUMN 2114H</td>
<td></td>
</tr>
<tr>
<td>Honors Roots of Culture, Philosophy, Humanities Colloquium</td>
<td>6-7</td>
</tr>
<tr>
<td>Honors Roots of Culture</td>
<td></td>
</tr>
<tr>
<td>HUMN 2124H</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 2003H</td>
<td></td>
</tr>
<tr>
<td>Colloquium in Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course offerings vary each semester.**

**Students pursuing either option must also complete the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Language (depending on placement)</td>
<td>0-9</td>
</tr>
<tr>
<td>See your adviser.</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Select from the following: ANTH 1023H, ECON 2013H, ECON 2023H, ECON 2013 and ECON 2023, PSYC 2003H, SOCI 2013H</td>
<td></td>
</tr>
<tr>
<td>Colloquia in Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Must be selected from two different areas of social sciences. See adviser for specific science course listing.</td>
<td></td>
</tr>
<tr>
<td>Natural Science</td>
<td>8</td>
</tr>
<tr>
<td>Eight hours of honors to be chosen from lab sciences. See adviser for specific science course listing.</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3-4</td>
</tr>
<tr>
<td>Fulbright Scholars must fulfill the math requirement of MATH 2043 or MATH 2053 or MATH 2183 or MATH 2554.</td>
<td></td>
</tr>
</tbody>
</table>

---

**GRADUATE STUDIES**

The Graduate School, in cooperation with the faculty of Fulbright College of Arts and Sciences, offers work leading to the graduate certificate or to the degrees of Master of Arts, Master of Science, Master of Music, Master of Fine Arts, Master of Public Administration, Master of Social Work, and Doctor of Philosophy.

Students interested in any of these advanced degrees should consult the Graduate School Catalog or the Dean of the Graduate School.

---

**ACCREDITATIONS**

The American Council on Education in Journalism and Mass Communications has accredited the Bachelor of Arts (B.A.) degree program in journalism. The Bachelor of Arts (B.A.), Bachelor of Music (B.M.), and Master of Music (M.M.) degree programs in the Department of Music are accredited by the National Association of Schools of Music. The Doctor of Philosophy (Ph.D.) degree program in clinical psychology is accredited by the American Psychological Association. The Bachelor of Social Work (B.S.W.) degree and the Master of Social Work (M.S.W.) degree are accredited by the Council on Social Work Education.
DEPARTMENTS, MAJORS AND MINORS

AFRICAN AND AFRICAN AMERICAN STUDIES (AAST)

Calvin White  
Chair of Studies  
416 Old Main  
479-575-3001  
http://aast.uark.edu

FACULTY

- Professor Morgan (sociology), Robinson (history)
- Associate Professors D’Alisera (anthropology), Jones (music)
- Assistant Professor White (history)

Students who wish to gain knowledge and understanding of the history, social organization, current status, and problems of African Americans and of their contributions to the American heritage may elect a combined major in African and African American studies together with a major in anthropology, economics, history, philosophy, political science, psychology, sociology, or social welfare.

Requirements for a Combined Major in African and African American Studies:

1. Eighteen hours in African and African American Studies courses in addition to the requirements for the departmental major;
2. African and African American Studies required courses: HIST 3233 African American History to 1877, HIST 3243 African American History since 1877, ANTH 4583 Peoples and Cultures of Sub-Saharan Africa;
3. The remaining six hours will be selected from the following recommended courses:
   - ANTH 4513 African Religions: Gods, Witches and Ancestors
   - HIST 3253 The History of Sub-Saharan Africa
   - HIST 4563 The Old South 1607-1865
   - HIST 4573 The New South, 1860 to Present
   - SOCI 4073 Peoples of East Africa
   - SOCI 4123 Black Ghetto
   - WLLT 4993 African Literature
   - And selected Special Topics/Special Studies courses with approval from AAST adviser;
4. No course can be counted both for African and African American Studies and the departmental major.

With careful advising, a combined major of African and African American Studies and majors other than those listed may be developed to meet student needs. Members of the African and African American Studies Committee and interdepartmental committee are Charles Robinson (chair), history; Yimisi Jimi, English; Gordon Morgan, sociology; Charlene Johnson, education; JoAnn D’Alisera, anthropology; John Newman, art; and Carl Riley, arts and sciences.

Requirements for a Minor in African and African American Studies: HIST 3233, HIST 3243 and one of the following ANTH 4513, ANTH 4583, or SOCI 4073. In addition, at least 6 hours of approved elective courses. Interested students should consult with the African/African American Studies Chairman for selection of appropriate classes.

Students desiring further information may consult with assistant professor White of the history department.

See Page 308 for African and African American Studies (AAST) courses.

AMERICAN STUDIES (AMST)

Robert B. Cochran  
Chair of Studies  
530 Old Main  
479-575-7708  
http://www.uark.edu/misc/carsinfo/major.htm  
rcochran@uark.edu

The J. William Fulbright College of Arts and Sciences has a long-established commitment to the study of American cultures. Virtually every department offers courses centered on various aspects of human experience on the North American continent. The American Studies major promotes interdisciplinary approaches to these fields and provides substantial flexibility for students wishing to design tightly focused or highly individualized courses of study.

Requirements for a Major in American Studies: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

The American Studies major program requires 30 semester hours, which must include the following:

2. Three hours of American history, HIST 2013 or HIST 2014.
4. Three hours of American literature to be selected from ENGL 3833, ENGL 3843, ENGL 3853 or ENGL 3863. (Papers submitted in this course will fulfill the Fulbright College writing requirement.)
5. Eighteen hours to be selected from the following courses, with the selection to include:
   a. At least one of the following:
      - ARCH 4483, ARHS 4913, ARHS 4923, COMM 4143, COMM 4353, COMM 4383, COMM 4883, MUHS 4253
   b. At least one of the following:
      - ANTH 3213, ANTH 3253, GEOG 4063, SOCI 3193, SOCI 3253
   c. At least one of the following:
      - PLSC 3513, PLSC 3853, PLSC 3933, PLSC 4203
   d. Nine hours in the chosen area of concentration. Sample areas of concentration include the following:
      - African American Culture – selections from:
         - HIST 3233, PLSC 4243, SOCI 4123, and other approved courses.
      - Contemporary Politics – selections from:
         - COMM 4383, HIST 4733, SOCI 3153, and other approved courses.
      - Gender Issues – selections from:
         - ENGL 3923H, and other approved courses.
      - Native American Culture – selections from:
         - ANTH 3213, ANTH 3263, HIST 3263, and other approved courses.
      - Southern Culture – selections from:
         - ENGL 3923H, HIST 4563, HIST 4753, and other approved courses
      - Western or Frontier Studies – selections from:
         - HIST 3383, HIST 4663, PLSC 3223, and other approved courses.

Requirements for the Major in American Studies with Emphasis on Regional Studies: Students wishing to major in American Studies with emphasis on regional studies may complete requirements (1), (2), (3), (4), and (5) as all majors. They must also complete ANTH or SOCI 3253 to satisfy requirement (5A) and PLSC 3223 to satisfy requirement (5C). Either HIST 4563, or HIST 4573 must also be completed in satisfying requirement (5D). These requirements total nine hours, leaving six elective hours to complete requirement (5D).
American Studies  

Eight-Semester Degree Program  

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area. Students must complete at least 124 hours and this must be considered when scheduling upper-level hours in the senior year.

### Fall Semester Year 1  
1. ENGL 1013 Composition I  
2. MATH 1203 (if required) or any higher-level MATH  
3. HIST 2003 History of the Am People to 1877 or HIST 2013 History of the Am People 1877-present  
4. AMST 2003 Intro to Am Studies or General Elective  
5. University/state social science requirement  
15 Total Hours

### Spring Semester Year 1  
1. ENGL 1023 Composition II  
2. University/state fine arts or humanities core requirement  
3. PLSC 2003 American National Government  
4. General Elective  
5. Science university/state core lecture with corequisite lab requirement  
16 Semester Hours

### Fall Semester Year 2  
1. AMST 2003 Intro to Am Studies (if needed) or General Elective  
2. †Course from Group 1, 2, 3 or 4 below (as needed)  
3. †American Literature Course or University/state core social science requirement  
4. University/state humanities or fine arts core requirement (as needed)  
5. Science university/state core lecture with corequisite lab requirement  
16 Semester Hours

### Spring Semester Year 2  
1. †Course from Group 1, 2, 3 or 4 below (as needed)  
2. †Course from Group 1, 2, 3 or 4 below (as needed)  
3. General Electives  
15 Semester Hours

### Fall Semester Year 3  
1. †Course from Group 1, 2, 3 or 4 below (as needed)  
2. †Course from Group 1, 2, 3 or 4 below (as needed)  
3. University/state core social science requirement or †American Literature Course (as needed)  
4. †Advanced Level Elective  
16 Semester Hours

### Spring Semester Year 3  
1. †Course from Group 1, 2, 3 or 4 below (as needed)  
2. †Upper Level Fulbright College Elective  
3. General Electives  
4. †Advanced Level Elective  
16 Semester Hours

### Fall Semester Year 4  
1. †Upper Level Fulbright College Elective  
2. General Electives  
3. †Advanced Level Elective  
15 Semester Hours

### Spring Semester Year 4  
1. †Upper Level Fulbright College Elective  
2. †Advanced Level Elective  
3. General Electives  
15 Semester Hours

124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter  
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

The following groups are referenced in the eight-semester plan above.

### Group 1  
ARCH 4483 Architecture of the Americas  
ARHS 4913 American Art to 1860 (ARHS 2923)  
ARHS 4923 American Art 1860-1960 (ARHS 2923)  
COMM 4143 American Film Survey

### Requirements for the Certificate in American Studies for International Students Not Seeking a University of Arkansas Degree  
International students not seeking a University of Arkansas degree may receive a certificate in American Studies by completing requirements (2) and (3), plus completing a total of twelve hours in any combination from the courses listed under requirement (4). This represents a total of 18 hours.

### Requirements for Departmental Honors in American Studies  
The Departmental Honors Program in American Studies offers junior and senior students the opportunity to enroll in enriched courses and to conduct independent research. In addition to satisfying all other requirements for the major, honors candidates must complete at least 12 hours of honors work, including six in honors essay. The Honors Program in American Studies requires a total of 33 hours in addition to University and college requirements.
Courses in anthropology provide an introduction to world peoples, their ways of living, and world views. Anthropology helps students to better understand human similarities and differences.

The department of anthropology offers the Bachelor of Science degree in anthropology. The Bachelor of Science degree program is geared toward students with specializations in anthropological sciences. It is recommended for students planning to continue their education in basic or applied anthropological sciences in graduate or professional school. A B.S. degree in anthropology is also useful students planning to continue their education toward health or medical related careers.

Bachelor of Science in Anthropology

The department of anthropology offers the Bachelor of Science degree in anthropology. The Bachelor of Science degree program is geared toward students with specializations in anthropological sciences. It is recommended for students planning to continue their education in basic or applied anthropological sciences in graduate or professional school. A B.S. degree in anthropology is also useful students planning to continue their education toward health or medical related careers.

Requirements for a B.S. Degree with a Major in Anthropology: A minimum of 124 hours is required, including 55 hours specified as designated below.

Required Anthropology Core Courses: ANTH 1013/1011L, Introduction to Biological Anthropology and Laboratory, ANTH 1023 Introduction to Cultural Anthropology, ANTH 3023/3021L Approaches to Archeology and Laboratory, and ANTH 4013 History of Anthropological Thought.

Anthropology Electives: 15 hours selected from courses numbered 3000 or higher.

Science: A minimum of 20 hours of electives from BIOL, CHEM, GEOL, and/or PHYS.

Math: Minimum of 6 hours of math beyond College Algebra (MATH 1203) selected from among the following courses: MATH 1213 Plane Trigonometry or MATH 1284C Precalculus Mathematics, MATH 2554 Calculus I, MATH 2564 Calculus II or STAT 2303 Principles of Statistics.

The following courses are strongly recommended for those students pursuing a health or medical-related career: ANTH 3423/3421L Human Osteology, BIOL 1603/1601L Principles of Zoology, BIOL 2013/2011L General Microbiology, BIOL 2213/2211L Human Physiology, BIOL 2323/2321L General Genetics, BIOL 2443/2441L Human Anatomy, BIOL 3023 Evolutionary Biology, BIOL 3404 Comparative Vertebrate Morphology, BIOL 4234 Comparative Physiology, BIOL 4263 Cell Physiology, BIOL 4713/4711L Immunology, CHEM 3603/3601L Organic Chemistry, and CHEM 3813 Introduction to Biochemistry.

Anthropology B.S.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

4 ANTH 1013/1011L Introduction to Biological Anthropology
3 ENGL 1013 Composition I
3 MATH 1203 College Algebra (if required) or MATH 1284C or †MATH 2554
3 ANTH 1023 Introduction to Cultural Anthropology
3 University/state humanities or fine arts core requirement
16 Semester Hours

Spring Semester Year 1

3 ENGL 1023 Composition II
3 MATH 1284C Precalculus Mathematics or †MATH 2554 Calculus I
4 Science university/state core lecture and corequisite lab from BIOL, CHEM, GEOL or PHYS
3 U.S. History Core: HIST 2003 or HIST 2013 or PLSC 2003
3 University/state Social Science core course
17 Semester Hours

Fall Semester Year 2

3-4 †MATH 2554 Calculus I (if not previously met) or †MATH 2564 or †STAT 2303
3 3 University/state fine arts core course
4 Science elective and accompanying laboratory from BIOL, CHEM, GEOL or PHYS
3-4 General Elective
14 Semester Hours

Spring Semester Year 2

3 Science elective and accompanying laboratory from BIOL, CHEM, GEOL or PHYS
3 †ANTH 3023/3021L Approaches to Archeology
3 Science elective and accompanying laboratory from BIOL, CHEM, GEOL or PHYS
6 University/state social science core course
15 Semester Hours

Fall Semester Year 3

6 †ANTH electives among 3000-4000-level courses
3 †3000-4000-level Fulbright College electives
3 General Electives
15 Semester Hours

Spring Semester Year 3

9 †ANTH electives among 3000-4000-level courses
3 †3000-4000 level General Electives
4 Science elective and accompanying laboratory from BIOL, CHEM, GEOL or PHYS
16 Semester Hours

Fall Semester Year 4

3 †ANTH 4013 History of Anthropological Thought
12 †3000-4000 level General Electives (or 2000-level Advanced level elective)
15 Semester Hours

Spring Semester Year 4

4 General Electives
16 Semester Hours
124 Total Hours

1 Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.

1 Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Bachelor of Arts in Anthropology

Requirements for a Bachelor of Arts Degree with a Major in Anthropology: 35 semester hours including ANTH 1013, ANTH 1011L, ANTH 1023, ANTH 3023, ANTH 3021L, and ANTH 4013.

These 35 hours must also include:
One course in each ANTH subfield (Cultural, Archeology, Biological) beyond the core (9 hours).
3 hours from each of two different geographical areas in ANTH for a total of 6 hours.
Optional Specializations

Specialization in Archeology:
To complete the specialization, a student is required to fulfill the following course requirements:
Three of the following method and theory courses or equivalent classes offered under ANTH 3903 and ANTH 4903, approved as having an archeological method and theory focus (9 credits).

- ANTH 4093 Archeology of Death
- ANTH 4353 Laboratory Methods in Archeology
- ANTH 4443 Cultural Resource Management I
- ANTH 4603 Landscape Archeology
- ANTH 4633 Archeological Prospecting and Remote Sensing
- ANTH 4813 Ethnographic Approaches to the Past
- ANTH 4803 Historical Archeology

Archeological Field Session (6 credits)

ANTH 4256

Specialization in Biological Anthropology:
To complete the specialization, a student is required to fulfill the following course requirements:
Four of the following courses in biological anthropology, including any 3000-4000 special topics or seminar courses offered that are deemed appropriate for training in any of the subdisciplines of biological anthropology (12-13 credits).

- ANTH 3423/3421L Human Osteology
- ANTH 3433 Human Evolution
- ANTH 3443 Criminalistics: Forensic Sciences
- ANTH 3533 Medical Anthropology
- ANTH 3923H Honors Colloquium: Primate Behavioral Ecology
- ANTH 4523 Dental Science
- ANTH 4613 Primate Adaptation and Evolution

Specialization in Cartography/Remote Sensing/GIS:
This program gives students an opportunity to develop expertise in (1) cartography, map design and computer-assisted map production, (2) remote sensing and image interpretation, including photogrammetric systems, sensor systems, and digital image processing, and (3) geographic information systems, including data sources, analytical techniques, and hardware/software systems.

To complete the specialization, a student is required to fulfill the following course requirements.

Required Courses:
- GEOG 3023, GEOS 4413, and ANTH 3543
- GEOL 5423, ANTH 4553, ANTH 4563, ANTH 4593

Elective Courses (9 hours to be selected from the following):
- GEOL 4523, GEOS 4413, ANTH 4553, ANTH 4563, ANTH 4593
- STAT 4003 (or other approved statistics course)
- CVEG 2053 (or other approved surveying course)

Specialization in Cultural Anthropology:
To complete the specialization, a student is required to fulfill the following course requirements:
Students must take a world language through the 2013 level (up to 12 credits). Two of the following method and theory courses or equivalent classes offered under ANTH 3903 and ANTH 4903 approved as having a cultural anthropology method and theory focus (6 credits).

- ANTH 3123 The Anthropology of Religion
- ANTH 3143 Language and Expressive Culture
- ANTH 3163 Male and Female: A Cultural and Biological Overview
- ANTH 3533 Medical Anthropology
- ANTH 4033 Popular Culture
- ANTH 4143 Ecological Anthropology
- ANTH 4363 Museums, Material Culture, and Popular Imagination
- ANTH 4813 Ethnographic Approaches to the Past

Writing Requirement: The Fulbright College research/analytical paper requirement for anthropology majors is fulfilled in ANTH 4013.

Requirements for Departmental Honors in Anthropology:
The Departmental Honors Program in Anthropology provides an opportunity for outstanding undergraduate majors to conduct independent research under the supervision of a faculty member. The research project culminates in an honors thesis, which is primary for the award “Anthropology Scholar Cum Laude.” Higher degree distinctions are recommended only in truly exceptional cases and are based upon the candidate's entire program of honors studies.

Honors candidates must meet the college requirements for an honors degree. They must complete and defend an honors thesis and take 12 hours, which may include 6 hours of thesis, in Honors Studies. The candidate is expected to maintain a minimum 3.5 cumulative grade-point average in anthropology and other core work.
ART (ARTS)

Jeannie Hulen
Chair of the Department
116 Fine Arts Building
479-575-5202
http://art.uark.edu

FACULTY
• Professors Jacobs, Peven
• Professor Emeriti Brody, Ross, Stout
• Associate Professors Hapgood, Hulen, La Porte, Mazow, Musgnug, Nelson, New-
  springer
• Associate Professor Emerita Golden
• Assistant Professor Walls
• Visiting Assistant Professors McConnell, Swartwood
• Instructors Edwards, Faur, Jones, Wiseman

Bachelor of Arts Degree

Transfer students should confer with the departmental advisers prior to entrance
for information concerning entrance requirements and transfer credits. Transfer credit
will be allowed from other accredited and recognized art departments if the credit
earned is compatible with program and course requirements within the University
of Arkansas Department of Art and reflects a grade of “C” or higher. In addition, a
student must spend a minimum of 2 semesters in residence. Credit for advanced stu-
dio classes in the department is contingent upon presentation of a portfolio of works
created in a college-level class equivalent to the class the student is seeking credit for in
the Department of Art. Professors in the relevant studio area will evaluate portfolios
and determine transfer credits.

Requirements for a Major in Art with a Concentration in Studio Art: In addition
to the university/state core requirements (see page 41) and the Fulbright College
of Arts and Sciences Graduation Requirements (see page 130 under College Academic
Regulations and Degree Completion Policy), the following course requirements must
be met.

A minimum of 58 semester hours, including 15 hours of courses, taken outside
the department of art (as approved by a departmental adviser); and 43 hours to include
ARTS 1013, ARTS 1323, ARTS 2013, ARTS 2313, ARTS 4921, and
at least 12 hours in art history to include: ARHS 2913 (Survey I) and 2923 (Survey
II); one course from ARHS 4833 (Ancient), ARHS 4843 (Medieval), ARHS 4853
(Italian Renaissance), ARHS 4863 (Northern Renaissance), ARHS 4873 (Baroque),
and one course from ARHS 4883 (18th and 19th Century European Art), ARHS
4893 (20th Century European), ARHS 4913 (American Art to 1860), ARHS 4923
(American Art 1860-1960), ARHS 4813 (History of Photography), ARHS 4823
(History of Graphic Design). In addition to the freshman year block of courses, the art
major must complete a minimum of three semesters (9 credits) in one specialty area of
art and a minimum of two semesters (6 credits) in a second area. Areas of selection are
drawing, painting, sculpture, printmaking, ceramics, photography, and visual design.
Art majors must complete a basic fine arts course that satisfies the University/state
core requirement from outside the Department of Art.

See Page 314 for Anthropology (ANTH) courses.

Art B.A. with a Concentration in Studio Art
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in
the Academic Regulations chapter for university requirements of the program. Core
requirement hours may vary by individual, based on placement and previous credit
granted. Once all core requirements are met, students may substitute a three-hour
(or more) general elective in place of a core area.

Primary concentration requires 9 hours in one area chosen from ceramics, drawing,
visual design, painting, photography, printmaking or sculpture.

Fall Semester Year 1
3 ENGL 1013 Composition I
3 MATH 1203 (or any higher level mathematics)
3 ARTS 1013 Drawing Fundamentals I
3 ARTS 1313 2-Dimensional Design
3 Approved non-Art Elective
15 Semester Hours

Spring Semester Year 1
3 ARTS 2313 Computer Applications in Art or ARTS 2313 Computer Applications in Art
3 ARHS 2913 Art History Survey 1
3 University/state core fine arts or humanities requirement
4 Science University/state core lecture w/corequisite lab requirement
3 General Elective
16 Semester Hours

Fall Semester Year 2
3 †ARTS primary or secondary concentration
3 †ARHS Upper Level ARHS Group 1 or 2 (below)
3 University/state core fine arts or humanities requirement
3 Approved non-Art Elective
3 †3000+ General Elective
15 Semester Hours

Spring Semester Year 2
3 †ARTS primary or secondary concentration
3 †ARHS Upper Level ARHS Group 1 or 2 (below, as needed)
3 University/state core social science core requirement
3 Approved non-Art Elective
3 †3000+ General Elective
4 General Electives
16 Semester Hours

Fall Semester Year 3
3 †ARTS primary or secondary concentration
3 †ARHS Upper Level ARHS Group 1 or 2 (below)
3 University/state core social science core requirement
3 †3000+ General Elective
6 General Electives
15 Semester Hours

Spring Semester Year 3
3 †ARTS primary or secondary concentration
3 †ARHS Upper Level ARHS Group 1 or 2 (below, as needed)
3 University/state core social science core requirement
3 †3000+ General Elective
4 General Electives
17 Semester Hours

124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic
  Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College),
in addition to meeting the 40-hour rule. See College Academic Regulations
on page 131 of this chapter.

Upper Level ARHS Group 1. Choose one course from:
ARHS 4833 Ancient Art (ARHS 2913)
ARHS 4843 Medieval Art (ARHS 2913)
ARHS 4853 Italian Renaissance Art (ARHS 2923)
Requirements for a Major in Art with a Concentration in Art History: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

A minimum of 51 semester hours:

- 3-9 hours – Completion of 2013 Intermediate II of a world language. (This is usually accomplished through completion of a sequence of language courses: 1013, 2003 and 2013. NOTE: 1003 usually will not count toward the 124 hours required for degree credit; see College Admission Requirements section for details.)
- 9 – Nine hours of courses from outside the department of art (as approved by a departmental adviser)
- And 39 semester hours including: ARTS 1013, 1313 or ARTS 1323, ARHS 2913, and ARHS 2923. In addition to the preceding requirements, 18 hours of upper division art history courses to include at least two courses selected from ARHS 4833, ARHS 4843, ARHS 4853, ARHS 4863, ARHS 4873, and ARHS 4983; and two courses selected from ARHS 4813, ARHS 4883, ARHS 4983, ARHS 4913, ARHS 4923, and ARHS 4993. In addition, two seminar courses in art history, and one elective course in art history or studio art.

Art majors must complete a basic fine arts course that satisfies the University/state core requirement from outside the department of Art.

Art B.A. with a Concentration in Art History

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour or more general elective in place of a core area.

Fall Semester Year 1

- 3 ENGL 1013 Composition I
- 3 MATH 1203 (or any higher level mathematics)
- 3 ARHS 2913 Art History Survey 1
- 3 1013 Elementary II world language (or higher level, depending on placement)
- 3 University/state core U.S. History, fine arts, or humanities requirement

15 Semester Hours

Spring Semester Year 1

- 3 ENGL 1023 Composition II
- 3 ARHS 2923 Art History Survey 2
- 3 ARTS 3013 Drawing Fundamentals 1
- 4 Science University/state core lecture with corequisite lab requirement
- 3 2003 Intermediate I world language (or higher level)

16 Semester Hours

Fall Semester Year 2

- 3 ARTS 3133 Two-Dimensional Design or ARTS 1323 Three-Dimensional Design
- 1 Upper Level Art History Group 1 or 2 (below)
- 3 2013 Intermediate II world language (as needed)
- 3 University/state core fine arts, humanities or U.S. History requirement (as needed)
- 3 University/state core social sciences requirement

15 Semester Hours

Spring Semester Year 2

- 3 Upper Level Art History Group 1 or 2 (below)
- 3 Advanced Level Elective

15 Semester Hours

Requirements for a Minor in Art History:

A minimum of 18 semester hours to include ARTS 1013, ARHS 2913, ARHS 2923, and three additional art history courses exclusive of seminars. A student must notify the department of his or her intent to minor. The minor is especially suited to students majoring in anthropology, English, foreign languages, history, philosophy, and music.

Requirements for Departmental Honors in Art: As part of the Honors Studies Program of the J. William Fulbright College of Arts and Sciences, the department of art provides the opportunity for academically superior junior- and senior-level students to acquire broader and deeper knowledge and skills in the visual arts and related disciplines. This is accomplished through independent research projects in studio art and/or art history under the direction of the art faculty. Outstanding achievement is recognized by awarding the distinction “Art Scholar Cum Laude.” Students may apply for honors studies beginning in the second semester of their sophomore year and normally will not be accepted into the program after completion of the second semester of their junior year. The department requires each applicant to have a minimum cumulative grade-point average of 3.5 in all college course work, a minimum grade-point average of 3.5 in all course work taken in the department of art, completed ARHS 2913 and ARHS 2923, completed at least 20 semester hours...
of work in art department courses, and at least 30 semester hours of general education requirements. Included in those hours, a student must complete and defend an honors thesis and take 12 hours, which may include 6 hours of thesis, in honors studies. Higher degree distinctions take into consideration the student’s entire academic career and are recommended for only those students whose honors projects and programs of study demonstrate a truly exceptional degree of creativity and scholarship.

**Bachelor of Fine Arts Degree**

**Admission:** Students earning a grade-point average of 3.00 or higher in art, after the completion of ARTS 1013, 1313, and 1323, and who have maintained an overall grade-point average of 2.00 are eligible to make application to the B.F.A. degree program. In addition to meeting the required grade-point average, all students must submit, as part of their application, a portfolio of current representative work for evaluation by the art faculty. Acceptance into the B.F.A. program is contingent upon favorable evaluation by the art faculty of the applicant’s portfolio. Upon acceptance into the B.F.A. degree program, each student will be assigned a major adviser for the purpose of completing a degree plan, which must meet departmental approval.

After entry into the B.F.A. program, the student is required to complete two semesters with a minimum of three credit hours of course work in their major studio area each semester.

Transfer credit will be allowed from other accredited and recognized art departments if the credit earned is compatible with program and course requirements within the UA art department and reflects a grade of “C” or higher. This department will not accept more than 50 percent of the required B.F.A. professional degree credits from another institution. The Department of Art will require portfolio review for acceptance of all studio art transfer courses above the foundations level.

**Degree Requirements:** The Bachelor of Fine Arts degree will be awarded to students, who, upon the completion of the approved program, have maintained a 3.0 grade-point average within the UA art department and a 2.00 grade-point average overall. Students in the B.F.A. program whose grade point average falls below 3.0 in art classes for two consecutive semesters will be dismissed from the B.F.A. program. A faculty-supervised critique of the work of each student, once each semester in the program, is required. A senior review and exhibition will be required prior to the granting of the degree.

**Off-campus Study Requirement:** Each student is required to complete an approved off-campus study experience each semester in the program. This may involve a field trip to an urban center that includes visits to major art collections.

**Requirements for the Bachelor of Fine Arts Degree with a Concentration in Studio Art:** In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. A minimum of 87 semester hours including ARTS 1013, ARTS 1313, ARTS 1323, ARTS 2003, ARTS 2313, ARTS 3333, ARTS 3023 or ARTS 4343, ARTS 4921, PHIL 2003, PHIL 4403, plus a minimum of 18 semester hours in the selected studio major, a minimum of 23 semester hours in art electives (must include a minimum of one course in each of the following areas: painting, sculpture, printmaking, visual design, photography, and ceramics. Up to six credit hours may be taken outside of the department with approval), and at least 15 semester hours in art history including ARHS 2913, ARHS 2923, and ARHS 4943.

**Art B.F.A. with a Concentration in Studio Art**

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Primary concentration requires 9 hours in one area chosen from ceramics, drawing, visual design, painting, photography, printmaking or sculpture.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th>3 ENGL 1013 Composition I  3 MATH 1203 College Algebra (or higher level mathematics)  3 ARTS 1013 Drawing Fundamentals I  3 ARTS 1313 2-Dimensional Design  3 ARHS 2913 Art History Survey I</th>
<th>15 Semester Hours</th>
</tr>
</thead>
</table>

**Spring Semester Year 1**

3 ENGL 1023 Composition II  3 ARTS 1323 3-Dimensional Design  3 ARTS 2013 Figure Drawing or ARTS 2313 Computer Applications in Art  3 ARHS 2923 Art History Survey II  3 University/state core social science requirement

15 Semester Hours

**Fall Semester Year 2**

3 Arts Primary Studio Concentration 1  3 ARTS 2313 Computer Applications in Art or ARTS 2013 Figure Drawing (as needed)  3 ARTS Elective area 1  3 Science University/state core lecture with corequisite lab requirement  3 University/state core social science requirement

16 Semester Hours

**Spring Semester Year 2**

3 1 Advanced Foundations Course  3 1 ARTS Elective area 2  3 1 ARTS Primary Studio Concentration 2  3 ARTS Elective area 3  3 1 ARHS Art History upper level  3 U.S. History University/state core requirement or PHIL 2003 (as needed)

15 Semester Hours

**Fall Semester Year 3**

3 1 ARTS Primary Studio Concentration 4  3 ARTS Elective area 4  3 ARTS Elective area 6  3 1 ARHS 4943 Seminar in Art Criticism  3 Social Science University/state core requirement  1 General Elective

16 Semester Hours

**Spring Semester Year 3**

3 1 ARTS Primary Studio Concentration 5  3 ARTS Elective area 5  3 ARTS Elective area 6  3 1 ARTS Upper-level Election (may be in primary area)  3 1 ARTS 4921 Senior Portfolio Review  3 1 PHIL 4403 Philosophy of Art  3 Arts Elective if needed or General Elective

16 Semester Hours

124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter

‡ Meets 24-hour rule (24 hours of 3000–4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

**Advanced Foundation Courses:**

ARTS 2003 Drawing Fundamentals II (Spring)  ARTS 3333 Color Studies (Fall)  ARTS 3023 Drawing III (Fall) or ARTS 4343 Advanced Design (Spring)

**Requirements for the Bachelor of Fine Arts Degree with a Concentration in Art Education:** A minimum of 76 hours to include:

- 3–6 – 2003 Intermediate I of a world language. This is usually accomplished through completion of a sequence of two language courses: 1013 and 2003. (NOTE: 1003 usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 130 for further details.)
The YOU of A

J. William Fulbright College of Arts and Sciences

3 – COMM 1313 Public Speaking
3 – PHIL 2003 Intro to Philosophy
3 – PHIL 4403 Philosophy of Art
3 – PSYC 2003 General Psychology
and ARTS 1013, ARTS 1313, ARTS 2313, ARTS 2033, ARTS 2013, ARTS
3333, ARTS 3023 or ARTS 4343, and ARTS 4921, a mini-
mum of 12 hours in a selected studio major and 6 hours in a selected studio
minor, at least 12 hours in art history including ARHS 2913, ARHS 2923,
and ARHS 4943, at least 6 hours of 3000- or 4000-level studio art electives
exclusive of the studio major and minor.

Students who wish to apply for admission to the internship program in art education
must complete the following stages.

Stage I: Complete an evaluation for internship. Students must also meet the
following criteria to be cleared for the internship:
1. Declare the major in art education in the Fulbright Advising Center, 518
Old Main.
2. Successful completion of the PRAXIS I test by meeting or exceeding the
Arkansas Department of Education cut-off scores. This test should be taken
after the student has completed 30 credit hours and upon completion of
ENGL 1013, ENGL 1023, and MATH 1203.
3. Obtain a “C” or better in the following pre-education core courses:
CIED 1002, CIED 1011, CIED 3023, and CIED 3033.
4. Obtain a “C” or better in ARED 5013, ARED 5103, ARED 5653.
5. Satisfactory completion of the Evaluation for Internship form. The Evalua-
tion form must be completed by October 1 prior to doing a fall internship or
March 1 prior to doing a spring internship. This form is available online at
http://coehp.uark.edu/Evaluation_for_Art_Internship.doc.

The completed form must be returned to the Coordinator of Teacher Edu-
cation, 8 Peabody Hall, no later than the stated deadline.

6. Complete the B.F.A. degree with a cumulative GPA of 2.50 or higher. The
degree must be posted to your University of Arkansas transcript at the Regis-
trar’s Office prior to internship.
7. Obtain departmental clearance for internship based on successful comple-
tion of portfolios, evaluation for internship, GPA requirements, course work
requirements, selected written recommendations, an interview, and/or other
requirements specified by your program.
8. Complete licensure packet available from the Coordinator of Teacher Educa-
tion, Peabody Hall Room 8.

All requirements in Stage I must be met to be cleared for the internship. Please
contact the Coordinator of Teacher Education, 8 Peabody Hall, College of Education
and Health Professions for more information.

Stage II: Internship
1. Complete the one-semester internship at an approved site in Washington or
Benton counties.
2. Complete Praxis II requirements. See your adviser for completion dates.

NOTE: Students should always consult the Coordinator of Teacher Education
for any licensure requirement changes. Students will not be licensed to teach in Ar-
kansas until they have met all requirements for licensure as set forth by the Arkansas
Department of Education.

Usually licensure in another state is facilitated by qualifying for a license in
Arkansas. An application in another state must be made on the application form of
that state, which can be obtained by request from the State Teacher Licensure office
in the capital city. An official transcript should accompany the application. In many
instances the applications are referred to the Coordinator of Teacher Education to
verify program completion in teacher education.

Writing Requirement: The Fulbright College research/analytical writing
requirement for art majors, B.A. and B.F.A. degrees, will be fulfilled in art history
courses ARHS 4833, ARHS 4843, ARHS 4853, ARHS 4863, ARHS 4873, ARHS
4943, and ARHS 4963. It also may be an honors thesis in art history (only).

Art B.F.A. with a Concentration in Art Education
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in
the Academic Regulations chapter for university requirements of the program. Core
requirement hours may vary by individual, based on placement and previous credit
granted. Once all core requirements are met, students may substitute a three-hour
(or more) general elective in place of a core area.

ARTS Electives exclusive of the studio major and minor to be selected from ARTS
3103, ARTS 3203, ARTS 3363, ARTS 3463, ARTS 3503 or ARTS 3523, ARTS 3803.

Fall Semester Year 1
3 ENGL 1013 Composition I
3 MATH 1203 College Algebra (or higher level mathematics)
3 ARTS 1013 Drawing Fundamentals I
3 ARTS 1313 Two-Dimensional Design
3 ARHS 2913 Art History Survey I
15 Semester Hours

Spring Semester Year 1
3 ENGL 1023 Composition II
3 ARTS 3323 3-Dimensional Design
3 *ARTS 2013 Figure Drawing or ARTS 2313 Computer Applications in Art
3 ARTS 2923 Art History Survey II
3 1013 Elementary I world language or higher (depending on placement in
sequence)
15 Semester Hours

Fall Semester Year 2
3 ARTS Primary Studio Concentration 1
3 *ARED Advanced Foundations Course
3 PSYC 2003 General Psychology
3 ARTS 2313 Computer Applications in Art or ARTS 2013 Figure Drawing (as
needed)
3 2003 Elementary II world language or higher level
15 Semester Hours

Spring Semester Year 2
3 *ARED Advanced Foundations Course (listed below)
3 *ARED Primary Studio Concentration 2
4 Science University/state core lecture with corequisite lab requirement
3 CIED 1002/1011 Introduction to Education
3 U.S. History University/state core requirement
16 Semester Hours

Fall Semester Year 3
3 *ARED Advanced Foundations Course (listed below)
3 *ARED Primary Studio Concentration 3
3 CIED 3033 Classroom Learning Theory
3 U.S. History University/state core lecture with corequisite lab requirement
3 PHIL 2003 Intro to Philosophy
16 Semester Hours

Spring Semester Year 3
3 *ARED Primary Studio Concentration 4
3 *ARED Advanced Foundations Course (listed below) or ARTS Secondary Studio
Concentration
3 *PHIL 4403 Philosophy of Art
3 *CIED 3033 Classroom Learning Theory
3 COMM 1313 Public Speaking
1 General Elective
16 Semester Hours

Fall Semester Year 4
3 ARTS elective (exclusive of studio major and minor)
3 ARTS Secondary Studio Concentration or ARTS Advanced Foundations Course
(listed below)
3 *ARHS 4943 Art Criticism
3 *ARED 3643 Teaching Art in Elementary schools
3 Social Science University/state core requirement
15 Semester Hours

Spring Semester Year 4
3 ARTS elective (exclusive of studio major and minor)
3 Social Sciences University/state core requirement
3 *ARED 3653 Teaching Art in Secondary Schools
1 *ARTS 4921 Senior Portfolio Review
3 *CIED 3023 Survey of Exceptionalities

142 The YOU of A
University of Arkansas, Fayetteville
For requirements for the M.E.A. degree program in art, see the Graduate School Catalog.

See Page 318 for Art (ARTS) courses.

ARTS AND SCIENCES (ARSC)

Charles H. Adams
Chair of Studies
525 Old Main
479-575-4801

Students may enroll in off-campus programs (ARSC) under special circumstances and with the approval of the Associate Dean of Fulbright College.

See Page 318 for Arts and Sciences (ARSC) courses.

ASIAN STUDIES (AIST)

Ka Zeng
Chair of Studies
428 Old Main
479-575-3356
http://aist.uark.edu

Requirements for the Asian Studies Combined Major:

Language Competence: Students must complete CHIN 2013 (or equivalent) or JAPN 2013 (or equivalent). Subject to the approval of the Director of Studies, students with language competence in one language (Chinese or Japanese) may receive some elective credit for competence level courses in the other language. Proficiency in other Asian languages may also satisfy this requirement.

In addition to the above language requirement, students must complete 21 hours in Asia-related courses, subject to the following conditions:

Colloquium (3-6 hours): Students must complete at least three hours in the interdisciplinary colloquium, AIST 4003/AIST 4003H. The AIST Colloquium may be repeated, provided the topic is different.

Electives (15-18 hours): In addition to the above requirements and the requirements for the departmental major, students must complete 15-18 hours of Asia-related courses (AIST approved electives listed below) subject to the following conditions of distribution:

1. Students must complete 6 hours of history courses;
2. Students must complete 6 hours of social science courses;
3. Courses must be selected from at least three different departments;
4. A maximum of nine hours may be submitted from any one department;
5. In addition, the following may be applied toward the major:
   a. Up to 6 hours of upper-level language courses (such as CHIN 3003, CHIN 3103, JAPN 3003, JAPN 3013, JAPN 3033);
b. Up to 6 hours of credits in an approved study-abroad program;
c. Up to 6 hours of CHIN or JAPN 3983/3983H (Special Studies);
d. Other Asia-related courses with approval of the director of Asian Studies

Requirements for a Minor in Asian Studies:

Students may earn a minor in Asian Studies by taking courses in art, anthropology, economics, geography, history, languages, sociology, political science, and literature of Asia. Students must fulfill the language requirement described below and complete 15 hours in Asia-related courses in order to earn the minor.

Language Requirement: Students must complete CHIN 2013 (or equivalent) or JAPN 2013 (or equivalent). At the discretion of the chair of studies, proficiency in other Asian languages may also satisfy this requirement.

Beyond the language requirement, students must complete 15 credit hours of approved courses, including at least three hours in the Asian Studies Colloquium (AIST 4003). The following courses may be taken in fulfillment of the elective requirements:

Approved AIST Electives

ECON 3933 Japanese Economic System
ECON 4633 International Trade Policy
HIST 3513 History of China to 1644
HIST 3523 Modern China
JAPN 4213 Japanese Culture
JAPN 4313/4313H Language and Society of Japan
MUSY 4113H Honors Ethnomusicology
MUSY 4313H Honors Special Topics in Asian and Middle Eastern Musics
MUSY 477V/477VH Independent Research in Ethnomusicology
PLSC 3503 Governments and Politics of East Asia
PLSC 4823 Foreign Policy of East Asia

Students may also apply three hours of credit in an approved study-abroad program in an Asian country and three hours of upper-level Chinese or Japanese toward the minor.

Other courses, MGMT 4583, International Management, and Performing Arts of East Asia, may be taken for credit toward the minor with the approval of the chair of Asian Studies.

See Page 313 for Asian Studies (AIST) courses.

BIOLOGICAL SCIENCES (BISC)

Frederick W. Spiegel
Chair of the Department
601 Science Engineering
479-575-3251
http://biology.uark.edu/

FACULTY

• Distinguished Professor Henry
• University Professors James, Smith (K.)
• Professors Beare, Brown, Durlik, Etges, Kral, Rhoads, Spiegel, Walker
• Professors Emeritus Evans, Kilambi, Martin, Meyer, Smith (E.), Talburt
• Research Professors Krementz, Magoullick, Stephenson
• Associate Professors Ivey, Lehrmann, McNabb, Pinto, Silberman
• Associate Professors Emeriti Bailey, Lane, Wickliff
• Assistant Professors Du, Evans-White, Huxel, Lesser, Tipsmark
• Assistant Research Professors Golforth, Radwell

The Department of Biological Sciences offers a Bachelor of Science degree for those students who seek a degree with a broad background in the life sciences. The B.S. is recommended for students planning to continue their education in basic or applied biology in graduate or professional school. A Bachelor of Arts degree is available for students who do not necessarily plan on a career as a professional biologist but who desire a good foundation in the discipline. Students seeking research experience are invited to participate in the college honors program.

Requirements for a B.S. Degree with a Major in Biology: A minimum of 124
hours is required, including 40 hours in the major as specified below.

1. Biology Core (13 hours): Cell Biology (BIOL 2533), General Genetics (BIOL 2323), Evolutionary Biology (BIOL 3023), General Ecology (BIOL 3863) and a minimum of one hour of Core Laboratory selected from Cell Biology Laboratory (BIOL 2531L), General Genetics Laboratory (BIOL 2321L), and General Ecology Laboratory (BIOL 3861L)

2. An additional 27 hours of electives in biology and/or biology-related electives including:
   a. No more than 8 hours of elective courses at the 1000 level. This includes Principles of Biology. Principles of Biology (BIOL 1543/1541L) is not required for the B.S. major. Well-prepared students, in consultation with their adviser, may opt to begin their coursework with the Core.
   b. At least 2 elective courses numbered 2000 or higher which are lab courses. This includes Core Labs taken in addition to the basic Core requirement. Courses whose catalog description explicitly excludes them from counting toward the major may not be used to meet this requirement. (Laboratory courses also include BIOL 480V, BIOL 480VH, BIOL 499V, and BIOL 499VH)
   c. At least 18 hours in BIOL courses numbered 3000 or higher, of which at least 12 hours must be from courses numbered 4000 or higher.
   d. A course meeting the Fulbright College writing requirement. (The means of meeting the writing requirement are listed following the description of Requirements for Departmental Honors in Biology.)

NOTE: Biology related electives that are not taught by the Department of Biological Sciences must be approved using the "Exception Request for Major or Minor Requirements" form.

Requirements in cognate science and mathematics include the following:

1. CHEM 1103/1101L (may be completed by advanced placement), CHEM 1123/1121L, CHEM 3603/3601L, CHEM 3613/3611L, CHEM 3813
2. PHYS 2013/2011L, PHYS 2033/2031L or PHYS 2054, PHYS 2074
3. MATH 2043 or MATH 2554 (MATH 2564 is recommended)
4. STAT 2023 or STAT 2303 or STAT 4003/4001L or MATH 2183

Requirements in Philosophy, must include one of the following: PHIL 2103 or PHIL 2203 or PHIL 3113 or PHIL 4213.

Biology B.S.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area. Students must complete at least 124 hours and this must be considered when scheduling upper-level hours in the senior year.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th>16-18 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I</td>
<td></td>
</tr>
<tr>
<td>3-4 MATH 2123 or 2284C or MATH 2554</td>
<td></td>
</tr>
<tr>
<td>4 BIOL 1543/BIOL 1541L Principles of Biology and Lab</td>
<td></td>
</tr>
<tr>
<td>3 CHEM 1103/1101L or CHEM 1103L (optional) University Chemistry I</td>
<td></td>
</tr>
<tr>
<td>3 US history requirement HIST 2003 or HIST 2013 or PLSC 2003, or core from Fine Arts</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 1</th>
<th>15 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1023 Composition II</td>
<td></td>
</tr>
<tr>
<td>4 MATH 2554 or MATH 2564</td>
<td></td>
</tr>
<tr>
<td>4 CHEM 1123/1121L University Chemistry II and Lab</td>
<td></td>
</tr>
<tr>
<td>3 Fine Arts or US history requirement HIST 2003 or HIST 2013 or PLSC 2003 (as needed)</td>
<td></td>
</tr>
<tr>
<td>1 General Elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th>15-16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4 BIOL 2533 Cell (BIOL 2531L optional)</td>
<td></td>
</tr>
<tr>
<td>4 CHEM 3603/3601L Organic Chemistry I and Lab</td>
<td></td>
</tr>
<tr>
<td>3 University/state core Social Science requirement or PHIL Requirement</td>
<td></td>
</tr>
<tr>
<td>4 BIOL lab course or approved BIOL-related elective 2000-level or above</td>
<td></td>
</tr>
<tr>
<td>1 General Elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-18 Semester Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 BIOL 3023 Evolutionary Biology</td>
</tr>
<tr>
<td>4 CHEM 3613 Introduction to Biochemistry</td>
</tr>
<tr>
<td>4 PHYS 2013/PHYS 2011L College Physics I and Lab or PHYS 2054 University Physics I</td>
</tr>
<tr>
<td>3 Core from humanities (if needed) or core from social science</td>
</tr>
<tr>
<td>3 Core from social science (as needed) or General Elective</td>
</tr>
<tr>
<td>16 Semester Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 BIOL 3633/BIOL 3631L optional General Ecology</td>
</tr>
<tr>
<td>4 PHYS 2013/PHYS 2011L College Physics II and Lab or PHYS 2074 University Physics II</td>
</tr>
<tr>
<td>4 BIOL lab course 2000-level or above</td>
</tr>
<tr>
<td>14-16 Semester Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 BIOL 3000-4000 Level Elective</td>
</tr>
<tr>
<td>3 BIOL 4000 Level Elective</td>
</tr>
<tr>
<td>3 STAT 2023 Biostatistics</td>
</tr>
<tr>
<td>3 General Elective</td>
</tr>
<tr>
<td>3 General Elective</td>
</tr>
<tr>
<td>15-17 Semester Hours</td>
</tr>
<tr>
<td>124 Total Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 BIOL 4000 Level Elective</td>
</tr>
<tr>
<td>3 BIOL 4000 Level Elective</td>
</tr>
<tr>
<td>3 BIOL 3000-4000 Level Elective</td>
</tr>
<tr>
<td>3 General Elective</td>
</tr>
<tr>
<td>3 General Elective</td>
</tr>
<tr>
<td>15-17 Semester Hours</td>
</tr>
</tbody>
</table>

Requirements for a B.A. Degree with a Major in Biology:

A minimum of 124 hours is required, including:

1. BIOL 1543/1541L Principles of Biology. Majors may substitute another 1000-level BIOL course (BIOL 1603/1601L Principles of Zoology or BIOL 1613/1611L Plant Biology) for BIOL 1543/1541L; a maximum of four 1000-level credits may be applied toward the major.

2. An additional 26 hours of biological sciences, including:
   a. Biology Core (13 hours): Cell Biology (BIOL 2533), General Genetics (BIOL 2323), Evolutionary Biology (BIOL 3023), General Ecology (BIOL 3863), and a minimum of one hour of Core Laboratory selected from Cell Biology Laboratory (BIOL 2531L), General Genetics Laboratory (BIOL 2321L), and General Ecology Laboratory (BIOL 3861L).
   b. Biology Electives (13 hours): include at least 9 hours in BIOL courses numbered 3000 or higher and at least one course numbered 2000 or higher with a laboratory. (Laboratory courses also include BIOL 480V, BIOL 480VH, BIOL 499V, and BIOL 499VH.)

3. Requirements in cognate science and mathematics include:
   a. CHEM 1103/1101L, CHEM 1123/1121L, and either CHEM 2613/2611L or CHEM 3603/3601L and CHEM 3613/3611L
   b. PHYS 2013/2011L, PHYS 2033/2031L
   c. MATH 2043 or MATH 2554
   d. STAT 2023 or STAT 2303 or STAT 4003/4001L or MATH 2183

4. Requirement in Philosophy: PHIL 2103 or PHIL 2203 or PHIL 3113 or PHIL 4213.
Biology B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

3 ENGL 1013 Composition I
3-4 MATH 1213 Plane Trig. or MATH 1284 Precalculus (if needed for MATH 2554 or Core from areas a, b, c, d or e (as needed)
4 BIOL 1543/BIOL 1541L Principles of Biology and Lab
3-4 CHEM 1103/1101L (CHEM 1101L optional)
1-2 General Elective (as needed for minimum 15-hour schedule)
15-16 Semester Hours

Spring Semester Year 1

3 ENGL 1023 Composition II
3-4 MATH 2043 Survey of Calculus or MATH 2554 Calculus I
4 CHEM 1123/CHEM 1121L Organic Chemistry I or CHEM 2133/2131L Organic Physiological Chemistry
3 HIST 2003 or HIST 2013 or PLSC 2003
3 Core from Fine Arts
16-17 Semester Hours

Fall Semester Year 2

3-4 *BIOI 2533 (BIOL 2531L optional) Cell Biology
4 *CHEM 3603/3601L or BIOL 2323/BIOL 2321L Gen. Genetics
3 Core area from Social Science
3 Core area from Social Science (as needed), or General Elective
3 General Elective
16-17 Semester Hours

Spring Semester Year 2

3-4 * BIOL 2323/BIOL 2321L (BIOL 2321L optional) Gen. Elective or BIOL 3023 Evolutionary Biology
4 CHEM 3613/3611L Organic Chemistry II or CHEM 2613/2611L Organic Physiological Chemistry
3 PHIL 2103 or PHIL 2203 or PHIL 3113 or PHIL 4213 or Core from Social Science (as needed)
3 Core from Humanities (as needed) or General Elective
3 General Elective or Core from Social Science (as needed)
16-17 Semester Hours

Fall Semester Year 3

3-4 * BIOL 3023 Evolutionary Biology or BIOL 3863/3861L (3861L lab optional) General Ecology or Biology Elective
3-4 * Biology Elective
4 PHYS 2033/ PHYS 2031L College Physics I
3 STAT 2023 or STAT 2303 or STAT 4003/4001L or MATH 2183
3 Core from Social Science (if needed) or PHIL 2103 or PHIL 2203 or PHIL 3113 or PHIL 4213
16-18 Semester Hours

Spring Semester Year 3

3-4 *BIOL 3863/ BIOL 3861L or * BIOL 3023 or * BIOL elective (below)
3-4 * BIOL 3000-4000 level Biology Elective
4 PHYS 2033/ PHYS 2031L College Physics II
3 General Elective
3 General Elective
16-18 Semester Hours

Fall Semester Year 4

3-4 * BIOL 3000-4000 Level Biology Elective
3-4 * BIOL 3000-4000 Level Biology Elective
9 General Electives
15-17* Semester Hours

Spring Semester Year 4

3-4 * BIOL 3000-4000 Level Elective from Zoology group
3-4 * BIOL 3000-4000 Level Elective
6 General Electives
3 * Upper Level Elective in Fulbright College (if needed for 24-hour rule) or General Elective
15-17 Semester Hours
124 Total Hours

* Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 24-hour rule. See College Academic Regulations on page 131 of this chapter.

Requirements for Departmental Honors in Biology: The biological sciences honors program is designed to provide students an opportunity to investigate questions in biology through an expanded reading program and research experience. Biological science majors may apply to enter the program between the second semester of the sophomore year and the end of the junior year. Application is made through both Honors Studies (MAIN 517) and the Department of Biological Sciences (SCEN 601). Applicants must have a 3.5 grade-point average. Students should consult with their adviser to identify and contact a potential faculty research mentor. The student’s research activities will then be directed by the departmental faculty member who agrees to sponsor the student.

Students may enroll for up to four hours of credit in BIOL 499V during the junior year and up to eight hours of credit in BIOL 499V during the senior year. A maximum of six of these credits may be applied toward a major. Participants must complete and defend an honors thesis and take 12 hours in Honors Studies, which may include six hours of thesis. The honors thesis is based on an original research project and presented orally before a committee composed of two faculty from the biological sciences, a person from outside the biological sciences, and a representative from the Honors Council. This committee makes a recommendation concerning the award of the honors distinction to the Honors Council. Students who successfully complete the departmental honors program usually graduate as “Departmental Scholar Cum Laude.” Higher degree distinctions are recommended only in exceptional cases and are based upon the candidate’s entire involvement in the honors program. Completion of an honors thesis fulfills the writing requirement in biological sciences, which precludes credit for BIOL 498V (Senior Thesis) for the same body of work.

Writing Requirement: The college writing requirement for majors in biology may be met by one of the following:
1. Completion of an honors thesis;
2. Completion of a senior thesis (BIOL 498V) supervised by a faculty member in biological sciences;
3. Completion of a required term paper with a grade of B or above in a BIOL course numbered 3000 or above on a topic approved by the instructor; or
4. Completion of a paper, supervised by a Biological Sciences faculty member, in Special Topics (BIOL 480V).

NOTE: A student exercising Option 3 or 4 may not use the paper written for that option for credit in BIOL 498V.

Requirements for a Minor in Biology: Students must take BIOL 1543/1541L, or equivalent, three biology core courses and two BIOL electives as outlined in the requirements for a B.A. degree in biology. A fourth biology core course may be selected as one of the electives. Students must notify the Fulbright College Dean’s Office of their intent to minor in biology using the Program Update form.

Biology (B.A. or B.S.) Life/Earth Science Teacher Licensure Requirements: Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

Students interested in teaching science in middle school should consult with a middle level adviser in the College of Education and Health Professions. For information on advanced degrees in biology, see the Graduate School Catalog.

See Page 322 for Biology (BIOL) courses.

BUSINESS MINOR FOR NON-BUSINESS STUDENTS

The Sam M. Walton College of Business minor requires completion of a minimum of 21 required hours of study (including equivalencies) with at least 50 percent of the courses applied toward the minor taken in residence. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor. All upper level minor requirements must be taken in residence.

Fulbright College students seeking a minor in the Walton College must notify the Fulbright College Dean’s Office (MAIN 525).

All students seeking a business minor are required to complete the Walton College computer competency requirement (WCOB 1120) and the following courses:

ECON 2143 Basic Economics Theory and Practice
Concentration 1 – General Business
Select 12 hours from the following courses (at least 6 hours must be 3000-4000 level)
WCOB 1012 Legal Environment of Business
WCOB 2013 Markets and Consumers
WCOB 2023 Production and Delivery of Goods and Services
WCOB 2033 Acquiring and Managing Human Capital
WCOB 2043 Acquiring and Managing Financial Resources
Plus any other 3000- or 4000-level Walton College course

Concentration 2 – Accounting
ACCT 2013 Accounting Principles
ACCT 3613 Managerial Uses of Accounting Information
ACCT 3723 Intermediate Accounting I
Plus an additional three hours selected from the following:
ACCT 3533 Accounting Technology
ACCT 3843 Fundamentals of Taxation

Concentration 3 – Business Economics
ECON 4333 Economics of Organizations
Plus an additional 9 hours of 3000- or 4000-level business economics courses

Concentration 4 – Enterprise Resource Planning
WCOB 2013 Markets and Consumers
WCOB 2043 Acquiring and Managing Financial Resources
WCOB 4213 ERP Fundamentals
Plus an additional three hours from the following:
ISYS 4233 Seminar in ERP Development
ISYS 4293 Business Intelligence
WCOB 4223 ERP Configuration and Implementation

Concentration 5 – Enterprise Systems
ISYS 4453 Introduction for Enterprise Servers
ISYS 4463 Enterprise Transaction Systems
Plus an additional six hours from the following:
ISYS 4233 Seminar in ERP Development
ISYS 4293 Business Intelligence
WCOB 4213 ERP Fundamentals
WCOB 4223 ERP Configuration and Implementation

Concentration 6 – Finance
WCOB 2043 Acquiring and Managing Financial Resources
Plus an additional nine hours of 3000- or 4000-level finance courses.

Concentration 7 – Information Systems
ISYS 3293 System Analysis and Design
ISYS 3393 Business Applications and Development Fundamentals
Plus an additional six hours from the following:
WCOB 4213 ERP Fundamentals
WCOB 4223 ERP Configuration and Implementation
One three hour 4000 level ISYS class

Concentration 8 – International Business
Select 12 hours from the following:
ECON 3843 Economic Development, World Bank, and Multilateral Finance
ECON 3853 Emerging Markets
ECON 3933 Japanese Economics
ECON 4633 International Trade
ECON 4643 International Macroeconomics and Finance
ECON 468V International Economics and Business Seminar
FINN 3703 International Finance
MGMT 4583 International Management
MKTG 4633 Global Marketing
SPCM 3643 International Transportation Logistics

Concentration 9 – Management
MGMT 4243 Ethics and Corporate Responsibility
Plus an additional 9 hours of 3000/4000 level management courses (may include WCOB 2033, Acquiring and Managing Human Capital or MGMT 3563, Organizational Behavior)

Concentration 10 – Marketing
MKTG 3433 Introduction to Marketing Strategy
Plus an additional 9 hours selected from the following:
MKTG 4233 Integrated Marketing Communications
MKTG 3553 Consumer Behavior
MKTG 3633 Marketing Research
MKTG 4343 Selling and Sales Management
MKTG 4633 Global Marketing
MKTG 4433 Retail Strategy
MKTG 4443 Retail Buying and Merchandise

Concentration 11 – Retail
MKTG 3433 Introduction to Marketing Strategy
MKTG 3553 Consumer Behavior
MKTG 4433 Retail Strategy
MKTG 4443 Retail Buying and Merchandise

Concentration 12 – Supply Chain Management
SPCM 3443 Principles of Transportation
SPCM 3613 Business Logistics
Plus an additional 6 hours selected from the following:
SPCM 3623 Purchasing and Inventory Systems
SPCM 3643 International Transportation and Logistics
SPCM 4633 Transportation Carrier Management
SPCM 4653 Transportation and Logistics

In addition to the above course requirements, non-business-degree-seeking students seeking a minor should note the following:
1. Students who elect to obtain a business minor must provide written notice of their intent to minor to the dean’s office of the college in which they are receiving a degree. This notice and all requirements for the business minor must be completed prior to the awarding of the student’s undergraduate degree.
2. Business minor students must complete all 1000- and 2000-level courses required for the business minor and be a junior- or senior-level student to enroll in 3000- or 4000-level business courses.
3. All specific course prerequisites must be met. Although business minor students are not required to satisfy the entire pre-business core, they must complete the required courses and any other prerequisite course specified prior to enrolling in a 3000/4000-level course.
4. Business minor students may complete multiple minors with the exception of General Business and an additional area of business study. Students may not use more than three hours of minor courses toward additional minor requirements.
5. ECON 2143 will substitute for ECON 2013/2023 for prerequisite purposes. In addition, students who take both ECON 2013 (Macroeconomics) and ECON 2023 (Microeconomics) will satisfy the economics requirements of the minor.
6. Business minor students are ineligible to take WCOB 3016 (Business Strategy and Planning).
7. All equivalencies must be approved by the assistant dean for undergraduate programs.
CHEMISTRY AND BIOCHEMISTRY (CHBC)

Bill Durham
Chair of the Department
119 Chemistry
479-575-4648
http://chemistry.uark.edu
cheminfo@uark.edu

FACULTY
• Distinguished Professors Gawley, Koepple, Millett, Pulay, Wilkins
• University Professors Durham, Hinton
• University Professor Emeriti Cordes, Fry
• Professors Bobbitt, Davis, Fritsch, McIntosh, Stenken, Stites
• Professors Emeriti Blyholder, Johnson, Thoma
• Associate Professors Adams, Allison, Kumar, Paul, Sakon, Tian
• Assistant Professors Chen, Heyes, Zheng
• Adjunct Professor Becker
• Adjunct Associate Professors Edkins, Turnball

Chemistry, Bachelor of Science Degree
Requirements for a B.S. degree with a Major in Chemistry: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

A minimum of 40 semester hours in chemistry including CHEM 1213/1211L, CHEM 1223/1221L, (or CHEM 1103/1101L, CHEM 1123/1121L), CHEM 2263, CHEM 2261L, CHEM 3504, CHEM 3512L, CHEM 3514, CHEM 3703/3702L, CHEM 3713/3712L, CHEM 4123, CHEM 4213/4211L, CHEM 4723, and at least one additional advanced lecture course is required. A minimum of 18 hours of science outside of chemistry and including mathematics through MATH 2574 and physics through PHYS 2074 are required. These mathematics and physics courses are prerequisites for some advanced courses and should be scheduled early in the student’s program. Some work in the biological sciences is recommended. This program meets the minimum requirements for certification by the American Chemical Society if CHEM 3813 (or CHEM 4813H/4843H or CHEM 5813/5843) is included. Sample schedules may be obtained from the department of chemistry and biochemistry. Prospective students should consult a departmental advisor.

Chemistry B.S.
Eight-Semester Degree Program
Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area. Students must complete at least 124 hours and this must be considered when scheduling upper-level hours in the senior year.

This program meets the minimum requirements for certification by the American Chemical Society if CHEM 3813 (or CHEM 4813H/4843H or CHEM 5813/5843) is included.

Fall Semester Year 1
3  ENGL 1013 Composition I
4  †MATH 2554 Calculus I
4  CHEM 1213/1211L Chem for Majors I or CHEM 1103/1101L University Chem I
3  University/state core U.S. history requirement
3  General Elective
17  Semester Hours

Spring Semester Year 1
3  ENGL 1023 Composition II
4  †MATH 2564 Calculus II
4  CHEM 1223/1221L Chemistry for Majors II or CHEM 1123/1121L University Chemistry II
3  University/state core social science requirement

Fall Semester Year 2
4  †MATH 2574 Calculus III
4  †PHYS 2054 University Physics I with lab component
5  †CHEM 3703/3702L Organic Chemistry I
3  University/state core fine arts or humanities requirement
16  Semester Hours

Spring Semester Year 2
4  †PHYS 2074 University Physics II
4  †CHEM 3713/3712L Organic Chemistry II for majors
3  University/state core humanities or fine arts requirement (as needed)
3  University/state core social science requirement
3  General Elective
17  Semester Hours

Fall Semester Year 3
4  †CHEM 3504 Physical Chemistry I
4  †CHEM 2263/2261L Analytical Chemistry Lecture/Lab
3-4  †Biol 1543/1541L or General Elective
3  University/state core social science requirement
14-15  Semester Hours

Spring Semester Year 3
3  †CHEM 3514/3512L Physical Chemistry II
4  Advanced Level Elective Course
3-4  †CHEM 4853/4851L (if still needed) or General Elective
13-14  Semester Hours

Fall Semester Year 4
3  †CHEM 4123 Advanced Inorganic Chemistry I
3  † CHEM 4723 Experimental Methods in Organic and Inorganic
3  † CHEM 3813 Introduction to Biochemistry
3  CHEM elective
3  General Elective
15  Semester Hours

Spring Semester Year 4
3  †CHEM 4213/4211L Instrumental Analysis
3  †CHEM 4853/4851L Biochemistry Techniques
6-9  General Electives (as needed to total 124)
12-15  Semester Hours
124  Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Requirements for a B.S. degree with a Major in Chemistry, Biophysical Option: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

A minimum of 43 semester hours in chemistry including CHEM 1213/1211L, CHEM 1223/1221L, (or CHEM 1103/1101L, CHEM 1123/1121L), CHEM 2263, CHEM 2261L, CHEM 3504, CHEM 3512L, CHEM 3514, CHEM 3703/3702L, CHEM 3713/3712L, CHEM 4123, CHEM 4213/4211L, CHEM 4723, and at least one additional advanced lecture course is required. A minimum of 18 hours of science outside of chemistry and including mathematics through MATH 2574 and physics through PHYS 2074 are required. These mathematics and physics courses are prerequisites for some advanced courses and should be scheduled early in the student’s program.

Chemistry B.S. with Biophysical Option
Eight-Semester Degree Program
Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area. Students must complete at least 124 hours and this must be considered when scheduling upper-level hours in the senior year.

This program meets the minimum requirements for certification by the American Chemical Society if CHEM 3813 (or CHEM 4813H/4843H or CHEM 5813/5843) is included. Sample schedules may be obtained from the department of chemistry and biochemistry. Prospective students should consult a departmental advisor.
CHEM 3813 and CHEM 4723, and either CHEM 4213/4211L or CHEM 4123, additional required courses to include MATH 2554 and MATH 2564, either PHYS 2013/2011L, PHYS 2033/2031L or PHYS 2054 with lab component, PHYS 2074 with lab component, and 15 hours of biological sciences to include BIOL 1543/1541L, BIOL 2533/2531L, BIOL 213/211L, and either BIOL 4233 or BIOL 2323. The mathematics and physics courses are prerequisites for some advanced courses and should be scheduled early in the student’s program.

Chemistry B.S. with Biochemistry Option

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

This program meets the minimum requirements for certification by the American Chemical Society if CHEM 3813 (or CHEM 4813H/4843H or CHEM 5813/5843) is included.

Fall Semester Year 1
3 ENGL 1013 Composition I
4 CHEM 1103/1101L University Chemistry
1 MATH 2554 Calculus I
3 University/state core fine arts or humanities course
17 Semester Hours

Spring Semester Year 1
3 ENGL 1023 Composition II
4 MATH 2564 Calculus II
4 CHEM 1123/1121L University Chemistry II
3 University/state core humanities or fine arts course (as needed)
3 University/state core U.S. history course
14 Semester Hours

Fall Semester Year 2
4 †CHEM 3603/3601L Organic Chemistry I
1 PHYS 2074 University Physics II
4 BIOL 1543/1541L Principles of Biology
3 University/state core social science course
15 Semester Hours

Spring Semester Year 2
4 †CHEM 3613/3611L Organic Chemistry II
1 PHYS 2074 University Physics II
4 BIOL 2553/2551L Cell Biology
3 †CHEM 2263 Analytical Chemistry
3 †Advanced Level Elective
18 Semester Hours

Fall Semester Year 3
3 †CHEM 2261L Analytical Chemistry Lab
4 †CHEM 3504 Physical Chemistry I
3 †Advanced Level Elective
3 University/state core social science course
3 General Elective
14 Semester Hours

Spring Semester Year 3
6 †CHEM 3514/3512L Physical Chemistry II
4 †CHEM 4213/4211L Instrumental Analysis
3 University/state core social science course
3 General Elective
16 Semester Hours

Fall Semester Year 4
3 †CHEM 5813 (4813H) Biochemistry I
3 †BIOL 3000/4000 Level Elective
9 General electives
15 Semester Hours

Spring Semester Year 4
3 †CHEM 5843 (4843H) Biochemistry II
3 †CHEM 4853 Biochemistry Techniques
9 General electives
15 Semester Hours
124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Requirements for a B.S. degree with a Major in Chemistry, Biochemistry Option: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

A minimum of 39 semester hours in chemistry including CHEM 1213/1211L, CHEM 1223/1221L (or CHEM 1103/1101L, CHEM 1123/1121L), CHEM 2263, CHEM 2261L, either CHEM 3504 and 3514/3512L or CHEM 3453/3451L, CHEM 3703/3702L, CHEM 3713/3712L, CHEM 4853 or completion of a senior thesis based on independent research wherein at least 1 credit hour is earned in CHEM 400V (chemistry research) and/or CHEM 498V (senior thesis) during each of 3 different semesters, CHEM 5813-5843 (same as CHEM 4813H-4843H) or
Chemistry, Bachelor of Arts Degree

The Chemistry Bachelor of Arts degree is appropriate for premedical students, prospective secondary school science teachers, and others who do not intend to pursue professional careers in chemistry.

Requirements for a B.A. degree with a Major in Chemistry: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

Completion of a world language course at the 2003 Intermediate I level (This is usually accomplished through completion of a sequence of two world language courses: 1013 and 2003. Please note: 1003 usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 130 for further details.), CHEM 1213/1211L, CHEM 1223/1221L, or CHEM 1103/1101L, CHEM 1123/1121L, CHEM 2263, CHEM 2261L, and 18 additional semester hours in chemistry to include CHEM 3703/3702L and 3713/3712L or CHEM 3603/3601L and 3613/3611L, and either CHEM 3453/3451L, or the combination CHEM 3504 and CHEM 3514/3512L and two additional lecture courses numbered above 3000. PHYS 2033/2031L and MATH 2043 or MATH 2043 are prerequisites for CHEM 3453, and PHYS 2043 and MATH 2574 are prerequisites for the alternate physical chemistry course sequence CHEM 3504 and CHEM 3514/3512L. These physics and mathematics prerequisite requirements are substantial, and these courses and their prerequisites should be scheduled early in the student's program. Sample schedules may be obtained from the department of chemistry and biochemistry. Prospective students should consult a departmental adviser.

Chemistry B.A.
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ENGL 1013 Composition I</td>
</tr>
<tr>
<td>3-4</td>
<td>MATH 1203 (if required) or MATH 2043 or MATH 2544 (as advised)*</td>
</tr>
<tr>
<td>4</td>
<td>CHEM 1213/1211L Chemistry for Majors I or CHEM 1103/1101L University Chemistry I</td>
</tr>
<tr>
<td>3</td>
<td>Elementary II world language course numbered 1013**</td>
</tr>
<tr>
<td>3</td>
<td>University/state core US history requirement</td>
</tr>
<tr>
<td>15-17 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester Year 1

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ENGL 1023 Composition II</td>
</tr>
<tr>
<td>3</td>
<td>MATH 2043 Survey of Calculus or MATH 2544 Calculus I* (as needed) or Elective</td>
</tr>
<tr>
<td>3</td>
<td>CHEM 1223/1221L Chemistry for Majors II or CHEM 1123/1121L University Chemistry II</td>
</tr>
<tr>
<td>3</td>
<td>Intermediate I world language course numbered 2003</td>
</tr>
<tr>
<td>3</td>
<td>University/state core social science requirement</td>
</tr>
<tr>
<td>15-16 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester Year 2

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-5</td>
<td>CHEM 3703/3702L Organic I for Majors or CHEM 3603/3601L Organic I</td>
</tr>
<tr>
<td>4</td>
<td>PHYS 2023/2021L College Physics I</td>
</tr>
<tr>
<td>3</td>
<td>University/state core fine arts or humanities requirement</td>
</tr>
<tr>
<td>3</td>
<td>University/state core social science requirement</td>
</tr>
<tr>
<td>3</td>
<td>General Elective</td>
</tr>
<tr>
<td>17-18 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester Year 2

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>CHEM 3713/3712L Organic II for Majors or CHEM 3613/3611L Organic II</td>
</tr>
<tr>
<td>4</td>
<td>PHYS 2023/2021L College Physics II</td>
</tr>
<tr>
<td>3</td>
<td>University/state core humanities or fine arts requirement (as needed)</td>
</tr>
<tr>
<td>3</td>
<td>University/state core social science requirement</td>
</tr>
<tr>
<td>3</td>
<td>General Elective</td>
</tr>
<tr>
<td>17-18 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester Year 3

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 2623 Analytical Lecture</td>
</tr>
<tr>
<td>4</td>
<td>CHEM 3453/3451L Elements of Physical CHEM</td>
</tr>
<tr>
<td>9</td>
<td>General Electives</td>
</tr>
<tr>
<td>16</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

Spring Semester Year 3

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 2623 Analytical Lecture</td>
</tr>
<tr>
<td>4</td>
<td>CHEM 3453/3451L Elements of Physical CHEM</td>
</tr>
<tr>
<td>9</td>
<td>General Electives</td>
</tr>
<tr>
<td>16</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

Fall Semester Year 4

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 3813 Introduction to Biochemistry or CHEM 3843H Biochemistry I</td>
</tr>
<tr>
<td>1</td>
<td>CHEM 2261L Analytical Lab</td>
</tr>
<tr>
<td>3</td>
<td>Upper Level Fulbright College Elective</td>
</tr>
<tr>
<td>7</td>
<td>General Elective</td>
</tr>
<tr>
<td>14</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

Spring Semester Year 4

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 4853 Biochemical Techniques</td>
</tr>
<tr>
<td>3</td>
<td>CHEM 4843H or CHEM 4113 Intermediate Inorganic Chemistry or CHEM 4043 Environmental Chemistry</td>
</tr>
<tr>
<td>9</td>
<td>General Electives</td>
</tr>
<tr>
<td>15</td>
<td>Semester Hours</td>
</tr>
<tr>
<td>124</td>
<td>Total Hours</td>
</tr>
</tbody>
</table>

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Spring Semester Year 2

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 3713/3712L Organic II for Majors or CHEM 3613/3611L Organic II</td>
</tr>
<tr>
<td>4</td>
<td>PHYS 2023/2021L College Physics II</td>
</tr>
<tr>
<td>3</td>
<td>University/state core humanities or fine arts requirement (as needed)</td>
</tr>
<tr>
<td>3</td>
<td>University/state core social science requirement</td>
</tr>
<tr>
<td>3</td>
<td>General Elective</td>
</tr>
<tr>
<td>17-18 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester Year 3

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 3813 Introduction to Biochemistry or CHEM 3843H Biochemistry I</td>
</tr>
<tr>
<td>1</td>
<td>CHEM 2261L Analytical Lab</td>
</tr>
<tr>
<td>3</td>
<td>Upper Level Fulbright College Elective</td>
</tr>
<tr>
<td>7</td>
<td>General Elective</td>
</tr>
<tr>
<td>14</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

Spring Semester Year 3

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 3813 Introduction to Biochemistry or CHEM 3843H Biochemistry I</td>
</tr>
<tr>
<td>1</td>
<td>CHEM 2261L Analytical Lab</td>
</tr>
<tr>
<td>3</td>
<td>Upper Level Fulbright College Elective</td>
</tr>
<tr>
<td>7</td>
<td>General Elective</td>
</tr>
<tr>
<td>14</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

Fall Semester Year 4

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 4853 Biochemical Techniques</td>
</tr>
<tr>
<td>3</td>
<td>CHEM 4843H or CHEM 4113 Intermediate Inorganic Chemistry or CHEM 4043 Environmental Chemistry</td>
</tr>
<tr>
<td>9</td>
<td>General Electives</td>
</tr>
<tr>
<td>15</td>
<td>Semester Hours</td>
</tr>
<tr>
<td>124</td>
<td>Total Hours</td>
</tr>
</tbody>
</table>

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

* Depending on placement; MATH 2043 Survey of Calculus is another option for this degree. Student may also choose to take MATH 1284C Precalculus in Fall Semester 1 and MATH 2554 Calculus in Spring Semester 1. Another option is to complete MATH 1203 in Fall Semester 3 and MATH 2043 Survey of Calculus in Spring Semester 1. ** This is usually accomplished through completion of a sequence of two world language courses: 1013 and 2003. (Please note: 1003 usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 130 for further details.)
**Chemistry B.A. with Biochemistry Option**

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. The following eight-semester plan refers to additional B.A. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

### Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4 MATH 2554 Calculus I or other mathematics course as advised for major*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 CHEM 1213/1211L Chem for Majors I or 1103/1101L University Chem I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Elementary II world language course numbered 1013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 University/state core US history requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>16-17 Semester Hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1023 Composition I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4 MATH 2564 Calculus II*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 CHEM 1223/1221L Chem for Majors II or 1123/1121L University Chem II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Intermediate II world language course numbered 2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 University/state core social science requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>16-17 Semester Hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 BIOL 1543/1541L Principles of Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 PHYS 2054/2050L University Physics I or PHYS 2013/2011L College Physics I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Advanced Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 University/state core fine arts or humanities requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 University/state core social science requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>17 Semester Hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CHEM 2263/2261L Analytical Chemistry and lab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 PHYS 2074 University Physics II or PHYS 2033/2031L College Physics II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Biology Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 University/state core humanities or fine arts requirement (as needed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 University/state core social science requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>17 Semester Hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 1 CHEM 3703/3702L Organic Chem I for Majors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 1 CHEM 3453/3451L Elements of Physical Chem or CHEM 3504 Physical Chem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 General Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 1 Upper Level Biology Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>16 Semester Hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Spring Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 1 CHEM 3713/3712L Organic Chem II for Majors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 1 CHEM 3514/3512L Physical Chem II or 1 CHEM Elective 3000-4000 Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 General Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>14 Semester Hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fall Semester Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 1 CHEM 3813 Introduction to Biochemistry or 1 CHEM 4813H</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 1 CHEM 4123 Advanced Inorganic Chem I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 General Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>15 Semester Hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Spring Semester Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 1 CHEM 4853 Biochemical Techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 1 CHEM 14043 or 112113 Intermediate Inorganic Chem or 14043 Environmental Chem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 General Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>15 Semester Hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>124</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Writing Requirement:

Chemistry majors will satisfy the Fulbright College writing requirement by satisfactory completion of the formal research/analytical reports required in Physical Chemistry Laboratory, CHEM 3451L or CHEM 3512L.

---

**Requirements for Departmental Honors in Chemistry:** Students with good academic backgrounds and strong interests in research are encouraged to participate in the department of chemistry and biochemistry honors program. Entrance into the program is normally during the sophomore year or the first semester of the junior year, and a minimum cumulative GPA of 3.5 is required. Entrance is initiated by consulting the faculty academic adviser, who will help arrange conferences with potential faculty research project advisers. When there is agreement between the student and the adviser on a research project or area, an Honors Advisory Committee is set up to supervise the honors candidate’s program. The heart of the program is the research project, but students are encouraged to broaden their experience beyond required courses within chemistry, the natural sciences, the social sciences, and the humanities. Participation in Honors Colloquia, honors sections of regular courses, and chemistry departmental and divisional seminars is especially recommended. All honors candidates enroll in the spring semester Honors Seminar (CHEM 4011H), and senior honors students must make at least one seminar presentation. All honors candidates will be required to complete and defend an honors thesis and take 12 hours (which may include 6 hours of thesis) in Honors Studies. The thesis is required in the spring semester of the senior year, followed by an oral presentation. On the basis of these written and oral reports and their evaluation of all aspects of the student’s honor program, the candidate’s Honors Advisory Committee will recommend whether or not the distinction “Chemistry or Biochemistry Scholar Cum Laude” should be awarded. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate’s program of honors studies.

**Requirements for a Minor in Chemistry:** 18 hours of courses above the 1000 level including CHEM 2263, CHEM 2261L, CHEM 3603/3601L, CHEM 3613/3611L, CHEM 3453, and a 3-hour course at the 3000-4000 level. A student must notify the department of his or her intent to minor.

**Chemistry (B.A. or B.S.) Physical/Earth Science Teacher Licensure Requirements:** Please refer to the Secondary Education Requirements for Fulbright College Students on page 125. Students wanting to teach science in middle school should consult with a middle level adviser in the College of Education and Health Professions.

---

**CLASSICAL STUDIES (CLST)**

Daniel B. Levine
Chair of Studies
502 Kimpel Hall
479-575-2951
http://classics.uark.edu

**FACULTY**

- Professors Levine, Spellman
- Associate Professors Coon, Fredrick

**Requirements for a Major in Classical Studies:** The college offers a major in classical studies leading to the Bachelor of Arts degree.

In addition to the state/university core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Program Policy), the following departmental and major course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

**Requirements for Departmental Honors in Classical Studies:** The college offers a major in classical studies leading to the Bachelor of Arts degree.

3 - COMM 1313 Public Speaking
3 - ENGL 2003 Advanced Composition (see catalog course description for exemption requirements) or ENGL 2013 Essay Writing
3 – Humanities, 3 of which must come from either PHIL 2003 or WLIT 1113; the remaining 3 hours may be fulfilled by any other state/university humanities core course.

Honors students who complete the HUMN 1114, 1124, 2114, 2124 (H2P) sequence will have fulfilled the World Civilization HIST 1113 and 1123 requirement for this major as well as the major’s 6-hour Humanities requirement (equivalent of WLIT 1113 and 1123).
Classical Studies B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

3 ENGL 1013 Composition I
3 MATH 1203 (if required) or MATH 2033, 2043, 2053, 2183 or 2554
3 Ancient GREK or LATN 1003 Elementary Classical Language I (if no high school ancient Greek or Latin was taken)
3 U.S. History university/state core requirement
3 Fine Arts or non-HIST Social Science university/state core requirement
15 Semester Hours

Spring Semester Year 1

3 CLST 1003, CLST 1013
3 HIST 4003, HIST 4013, HIST 4023, HIST 4043, HIST 4053
3 PHIL 4003 (prerequisite 3 hours of philosophy)
3 PHIL 4013 (prerequisite 3 hours of philosophy)
3 PHIL 4023.
No more than nine hours of electives from the medieval period may be applied to the major requirements.
3 Three hours of a classical studies colloquium (CLST 4003H).

Fall Semester Year 2

3 Ancient GREK or LATN 1003 Intermediate Classical Language I
3 GREK or LATN 1003 Elementary Classical Language I or General Elective
3 HIST 1113
3 PHIL 2003
3 CLST 1003 Introduction to Classical Studies: Greece (recommended) or other approved classical studies/language elective
15 Semester Hours

Spring Semester Year 2

3 Ancient GREK or LATN 2003 Intermediate Classical Language II
3 GREK or LATN 1013 Elementary Classical Language II or General Elective
1 Advanced Level Elective
4 Science university/state core lecture with corequisite lab requirement
3 HIST 1123
16 Semester Hours

Fall Semester Year 3

3 °GREK or LATN Advanced Language
3 GREK or LATN 2003 Intermediate Classical Language I or General Elective
1 Advanced Level Elective
3 ARHS 2913 Art History Survey I or General Elective
4 General Electives
16 Semester Hours

Spring Semester Year 3

3 GREK or LATN 2013 Intermediate Classical Language II or General Elective

Requirements for a Minor in Classical Studies: Students should select appropriate courses from the following areas:

1. 9 hours of Ancient Greek or Latin courses numbered above 2000,
2. 6 hours of additional work in classical languages and/or specific classical studies-related electives, to be selected from the following courses: ARCH 2233, ARHS 4833, ARHS 4843, CLST 1003, CLST 1013, HIST 4003, HIST 4013, HIST 4023, HIST 4043, HIST 4053, PHIL 4003, PHIL 4013, PHIL 4023.
3. Three hours of a classical studies colloquium (CLST 4003H).

Requirements for Honors in Classical Studies: The Honors Program in Classical Studies gives students of high ability the opportunity to strengthen their study of classics by intensifying their experience with ancient languages and cultures. In addition to the requirements for graduation with a major in classical studies and the general college requirements for a B.A. degree, honors candidates in classical studies must

1. be accepted as honors candidates by the Classical Studies Committee,
2. complete at least three semesters in a second classical language,
3. enroll in at least two 1-hour units of CLST 399VH and pursue independent-study topics under the guidance of classical studies faculty,
4. enroll for two hours of CLST 399VH and write an honors thesis, and
5. defend and discuss their entire honors program in an oral examination.
Successful completion of the requirements will be recognized by the award of the distinction "Classical Studies Scholar Cum Laude" at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate’s program of honors studies.

See page 335 for Classical Studies (CLST) courses
COMMUNICATION (COMM)

Robert M. Brady
Chair of the Department
417 Kimpel Hall
479-575-3046
http://communication.uark.edu
comm@uark.edu

FACULTY
• Professors Allen, Frentz, Scheide, Smith, Webb, Wicks
• Professors Emerit Rea, Rogers
• Associate Professors Amason, Brady, Rosteck, Warren
• Associate Professor Emeritus Bailey
• Assistant Professors Cavallero, Corrigan, Schulte, Veden, Walker
• Assistant Professor Emeritus Galloway
• Adjunct Assistant Professor Cowling

As a subject for academic study, communication bridges the humanities and the social sciences. It focuses on relationships – personal, group, and societal – and the factors and processes that affect important relationships. Friendships and families, business relationships and political systems, cultural interaction and technological advances are important areas of study in communication. Communication students may concern themselves with the dynamics of interpersonal persuasion, the effects of media technologies, the nature of gender stereotypes, the function of roles within the family, the structure of organizational authority, the influence of cultural myths, the impact of social movements, and the history of rhetoric. Because the program offers many diverse interests, there is a place for anyone with a genuine curiosity about human communication and its effect upon society.

Communication majors from recent graduating classes now hold responsible positions in government and public affairs, in management, marketing, and public relations within private business, and in television and mass media organizations. Many others are successfully pursuing further education in graduate and professional schools.

The department of communication offers general studies of the discipline, as well as concentration in three specific emphasis areas:
1. rhetoric and public communication,
2. interpersonal, small group, and organizational communication, and
3. mass communication.

Students may also select a program for acquisition of teaching certification in the field.

Admission Requirements for a Major in Communication: For standing as a major, entering freshmen must have ACT composite scores of 20 or higher, and those transferring into the program after the first semester of college study must have a cumulative grade-point average of 2.00 or higher.

Admission Requirements on page 130 for further details.) Alternatively, 6 hours of courses from a single culture or world region including African, Asian, European, Latin American and Latino, or Middle Eastern and Islamic may be used to fulfill this requirement. Courses must be approved by a departmental adviser.

University and College Requirements for a Major in Communication: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

3 hours – MATH 2033*, 2043C, 2053C, 2183*, 2554C, or STAT 2303*
* These courses are highly recommended.

6-9 hours – Completion of a world language course at the 2003 Intermediate I level is preferred. (This is usually accomplished through completion of a one semester foreign language courses: 1013 and 2003. Note: 1003 usually will not count toward the 124 hours required for degree credit; see College Admission Requirements on page 130 for further details.) Alternatively, 6 hours of courses from a single culture or world region including African, Asian, European, Latin American and Latino, or Middle Eastern and Islamic may be used to fulfill this requirement. Courses must be approved by a departmental adviser.

9 hours – Fine arts and Humanities courses to include: COMM 1003, one additional University/state fine arts core course, and one University/state humanities core course

42 hours – Communication courses:
9 hours consisting of COMM 1023, 1233 and 1313 (each with a minimum grade of “C”); 3 hours of COMM 2333 (with a minimum grade of “C”); 21 hours of communication courses numbered 3000-4000; 9 hours of communication electives.

Communication courses that may satisfy the College or University Core requirements will not count toward the communication electives. To graduate, students must have a cumulative grade-point average of 2.00 or above within the major.

Writing Requirement: The college writing requirement may be satisfied by a research paper achieving a grade of “C” or better submitted for an upper-division communication class and approved by the chair of the department.

Requirements for Departmental Honors in Communication: The Honors Program in communication gives an opportunity for a student to achieve an additional level of intellectual growth and a satisfaction of accomplishment. A student engages in independent research and writing, under the supervision of a member of the communication faculty, and participates in special honors classes, seminars, and colloquia.

Faculty recognize outstanding achievement by a student by recommending that the bachelor’s degree in communication be awarded with the distinction “Communi cation Scholar Cum Laude.” Higher distinctions may be awarded to truly outstanding students based upon the whole of their academic program and quality of honors research.

To enter the Honors Program, a student must possess a 3.5 minimum grade-point average on all academic work and receive the recommendation of a faculty member in communication to the Honors Council of Fulbright College. A student may pursue an independent research program of a historical, critical, descriptive, or experimental nature, within any of the areas of rhetorical or communication theory, history of public address, interpersonal, small-group, or organizational communication, persuasion, argumentation, political communication, freedom of speech, communication education, or in any closely related areas of inquiry. A student interested in mass communications, broadcasting, or film may choose to pursue either a research project or a creative study. In addition to satisfying the general college and departmental requirements for a bachelor’s degree, a student must satisfy departmental honors requirements, which include the following:

1. become an honors candidate no later than the first semester of the junior year of study,
2. enroll in COMM 399VH, Honors Course, a minimum of one hour of credit each semester during the junior-senior years,
3. achieve a 3.5 minimum grade-point average in communication,
4. take 12 hours, which may include 6 hours of thesis in Honors Studies, and
5. write and defend before a faculty examining committee a thesis based on the investigative or creative project undertaken in COMM 399VH.

For a full description of the Honors Program and its requirements, consult with an adviser in the department of communication.

Communication B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

9 English 1013 Composition I
3 MATH 1203 (if required) or MATH 2033, 2183, STAT 2303 or higher-level
3 COMM 1313 Public Speaking
3 University/state fine arts core requirement
3 University/state humanities core requirement
15 Semester Hours

The YOU of A

University of Arkansas, Fayetteville

152
### Spring Semester Year 1
1. **ENGL 1023 Composition II**
2. ‡‡ MATH 2033, 2183, STAT 2303 (or higher level math course, as required) or General Elective
3. Intermediate I world language course numbered 2003
4. COMM 1023 or COMM 1233
5. Fine Arts or Humanities core course or COMM 1003 (as needed)
15 Semester Hours

### Fall Semester Year 2
1. COMM 2333 Comm Research or any COMM elective
2. Science university/state core lecture with corequisite lab requirement
3. Social Science university/state core requirement
4. Fine Arts or Humanities core course or COMM 1003 (as needed)
5. COMM 1233 or COMM 1023 (as needed)
16 Semester Hours

### Spring Semester Year 2
1. ‡‡ Advanced Level Elective
2. COMM 2333 Comm Research or any COMM elective
3. Social Science university/state core requirement
4. Fine Arts or Humanities core course or COMM 1003 (as needed)
16 Semester Hours

### Fall Semester Year 3
1. ‡‡ 3000 or 4000-level COMM elective
2. ‡‡ 3000 or 4000-level COMM elective
3. ‡‡ Advanced Level Elective
4. Social Science university/state core requirement
3. General Elective
15 Semester Hours

### Spring Semester Year 3
1. ‡‡ 3000 or 4000-level COMM elective
2. ‡‡ 3000 or 4000-level COMM elective
3. ‡‡ Advanced Level Elective
6 General Electives
16 Semester Hours

### Fall Semester Year 4
1. ‡‡ 3000 or 4000-level COMM elective
2. ‡‡ 3000 or 4000-level COMM elective
3. ‡‡ 3000 or 4000-level COMM elective
4. General Electives
15 Semester Hours

### Spring Semester Year 4
1. ‡‡ 3000 or 4000-level COMM elective
2. ‡‡ 3000 or 4000-level COMM elective
3. ‡‡ 3000 or 4000-level Fulbright College elective
3. ‡‡ Advanced Level Elective (as needed)
15 Semester Hours
124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

---

### Requirements for a Minor in Communication
21 hours including at least 12 hours must be numbered 3000 or above. A student should consult with an adviser in the department for appropriate courses.

### Communication (B.A.) Drama/Speech Teacher Licensure Requirements
Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

---

### DRAMA (DRAMA)

D. Andrew Gibbs
Chair of the Department
619 Kimpel Hall  
479-575-2953  
http://www.uark.edu/depts/drama/  
drama@cavern.uark.edu

---

The Department of Drama offers the Bachelor of Arts (B.A.) degree in Drama, a broad spectrum program in the context of a liberal arts education, and the Master of Fine Arts (M.F.A.) degree in six concentrations: Acting, Directing, Playwriting, Costume Design, Scene Design and Lighting Design. (Please see the Graduate Catalog for information regarding the MFA degree.) Classes at both undergraduate and graduate levels are focused on providing a strong, professional orientation to theatre performance and technology in conjunction with appropriate research-based course work to address the required foundations in theatre history, dramatic literature and dramatic criticism.

The educational objectives of the Department of Drama are centered on producing graduates prepared to enter the competitive world of professional play production as well as a variety of teaching and research fields. In addition a background in Drama has proven to be a valuable asset to those wishing to pursue a wide range of corporate and industrial occupations.

The play production program is the “laboratory” for study in Drama. To that end the Department produces an average of 10 plays each year involving students in virtually all aspects of production. Auditions are open to all students on campus.

The Department of Drama also supports course work in Dance, offering a variety of basic and advanced studio courses.

**Requirements for a Major in Drama:** In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Program Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the university/state minimum core requirements.

- 6 – 3 hours of any world language at the 1013 Elementary II level and 3 hours of continued coursework in the same world language, or 3 hours of a different world language course. (Note: 1003 Elementary I world language courses may not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)
- 3 – ‡ MATH 2033, MATH 2043, MATH 2053, or MATH 2183 or any other higher-level math for which MATH 1203 College Algebra is a prerequisite
- 3 – A University/state core fine arts course other than DRAM 1003 Theatre Appreciation
- 6 – One 3-hour course from two of the following three categories:  
  1. HIST 1113 or HIST 1123 World Civilization I or II  
  2. WLIT 1113 or WLIT 1123 World Literature I or II  
  3. PHIL 2003 Intro to Philosophy or PHIL 2103 Intro to Ethics

In addition, all drama majors must complete a minimum of 40 semester hours of Drama courses to include 18 semester hours in courses numbered 3000 and above or the prescribed program for teacher licensure in speech education.

**All drama majors must complete the following 23 hours:**

DRAM 1223 Intro. to Dramatic Art or DRAM 1003 or DRAM 100H.  
(Note: students who fulfill this requirement with DRAM 1003 or DRAM 100H must also complete one additional University/state core fine arts
course. Drama majors may not receive credit for both DRAM 1223 and DRAM 1003.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th>15-16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 1223 Introduction to Theatre (Pre-requisite is DRAM 1003 or 3001)</td>
<td>3 ENGL 1013 Composition I</td>
</tr>
<tr>
<td>DRAM 1223 Theatre Direction I</td>
<td>3 DRAM 2313 Introduction to Theatrical Design (Pre-requisite is DRAM 1323/131L)</td>
</tr>
<tr>
<td>DRAM 1333 Stage Management</td>
<td>3 MATH 2033, 2043, 2053, 2183 or any higher-level math</td>
</tr>
<tr>
<td>DRAM 1313/1311 Stage Tech I or †Advanced Level Elective</td>
<td>3 1013 Elementary II world language course (depending on placement in language sequence)</td>
</tr>
<tr>
<td>DRAM 3803 Stage Tech II: Scenery &amp; Lighting/Lab or DRAM 1683 Acting I</td>
<td>3 Social science or US History university/state core requirement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 1</th>
<th>15-16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 1223 Theatre Direction II</td>
<td>3 ENGL 1023 Composition II</td>
</tr>
<tr>
<td>DRAM 1313/1311 Stage Tech II or †Advanced Level Elective</td>
<td>3 DRAM 1003 (Students who complete DRAM 1003 to satisfy this Drama B.A. requirement must take one additional university/state fine arts core course)</td>
</tr>
<tr>
<td>DRAM 1313/1311 Stage Tech II or †Advanced Level Elective</td>
<td>3 Fine arts (other than DRAM 1003)</td>
</tr>
<tr>
<td>DRAM 1313/1311, 2313</td>
<td>3 U.S. History or Social Science university/state core requirement</td>
</tr>
<tr>
<td>DRAM 1313/1311, 2313</td>
<td>3 General Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th>16-17 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 1223 Int. to Theatre Design (Pre-requisite is DRAM 1323/1321L)</td>
<td>3 Science university/state core lecture with corequisite lab requirement</td>
</tr>
<tr>
<td>DRAM 1223 Int. to Theatre Design (Pre-requisite is DRAM 1323/1321L)</td>
<td>3 Fine arts (other than DRAM 1003)</td>
</tr>
<tr>
<td>DRAM 1313/1311 Stage Tech I or †Advanced Level Elective</td>
<td>3 U.S. History or Social Science university/state core requirement</td>
</tr>
<tr>
<td>DRAM 1313/1311 Stage Tech I or †Advanced Level Elective</td>
<td>3 General Elective</td>
</tr>
<tr>
<td>DRAM 1313/1311 Stage Tech I or †Advanced Level Elective</td>
<td>3 General Elective (as needed) or 3 DRAM 2683 Acting II if planning to take †DRAM 3653 Directing I)*</td>
</tr>
<tr>
<td>15-16 Semester Hours</td>
<td>16-17 Semester Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 2</th>
<th>15-16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>†DRAM 2313 Intro. to Theatrical Design (If needed) or †DRAM 4233 History of the Theatre I or †Advanced Level Elective</td>
<td>3 Science university/state core lecture with corequisite lab requirement</td>
</tr>
<tr>
<td>†DRAM group A, B, C or D (as needed)</td>
<td>3 Fine arts (other than DRAM 1003)</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 U.S. History or Social Science university/state core requirement</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 General Elective</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 General Elective (as needed) or 3 DRAM 2683 Acting II if planning to take †DRAM 3653 Directing I)*</td>
</tr>
<tr>
<td>15-16 Semester Hours</td>
<td>16-17 Semester Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 3</th>
<th>15-16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>†DRAM 2313 Intro. to Theatrical Design (If needed) or †DRAM 4233 History of the Theatre I or †Advanced Level Elective</td>
<td>3 Science university/state core lecture with corequisite lab requirement</td>
</tr>
<tr>
<td>†DRAM group A, B, C or D (as needed)</td>
<td>3 Fine arts (other than DRAM 1003)</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 U.S. History or Social Science university/state core requirement</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 General Elective</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 General Elective (as needed) or 3 DRAM 2683 Acting II if planning to take †DRAM 3653 Directing I)*</td>
</tr>
<tr>
<td>15-16 Semester Hours</td>
<td>16-17 Semester Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 3</th>
<th>15-16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>†DRAM 4233 History of the Theatre I or †Advanced Level Elective</td>
<td>3 Science university/state core lecture with corequisite lab requirement</td>
</tr>
<tr>
<td>†DRAM group A, B, C or D (as needed)</td>
<td>3 Fine arts (other than DRAM 1003)</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 U.S. History or Social Science university/state core requirement</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 General Elective</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 General Elective (as needed) or 3 DRAM 2683 Acting II if planning to take †DRAM 3653 Directing I)*</td>
</tr>
<tr>
<td>15-16 Semester Hours</td>
<td>16-17 Semester Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 4</th>
<th>15-16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>†DRAM 4233 History of the Theatre I (If needed) or †DRAM group A, B, C or D (as needed)</td>
<td>3 Science university/state core lecture with corequisite lab requirement</td>
</tr>
<tr>
<td>†DRAM group A, B, C or D (If needed) or General Elective</td>
<td>3 Fine arts (other than DRAM 1003)</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 General Elective</td>
</tr>
<tr>
<td>†Advanced Level Elective</td>
<td>3 General Elective (as needed) or 3 DRAM 2683 Acting II if planning to take †DRAM 3653 Directing I)*</td>
</tr>
<tr>
<td>15-16 Semester Hours</td>
<td>16-17 Semester Hours</td>
</tr>
</tbody>
</table>
ECONOMICS (ECON)

Gary D. Ferrier
Chair of the Department
402 Business Building
479-575-ECON (3266)
http://waltoncollege.uark.edu/ECON/default.asp

FACULTY
- University Professors Britton, Gay
- University Professor and Lewis E. Epley Jr. Professor in Economics Ferrier
- Margaret Gerig and R.S. Martin Jr. Chair in Business Professor Farmer
- ConocoPhillips Chair in International Business and Economics Associate Professor Kali
- Professors Curington, Deck, Dixon, Horowitz, Ziegler
- Associate Professors Mendez, Reyes
- Assistant Professors Cvevill, Gu, Hao, Jahedi
- Clinical Professor Stapp
- Clinical Assistant Professor Embaye

Requirements for a Major in Economics: In addition to the University/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

30 semester hours of ECON courses, including ECON 2013 and ECON 2023, ECON 3033, ECON 3133, ECON 4743 or ECON 4753, and ECON 4033.
COM 1313 Public Speaking
MATH 2043 Survey of Calculus and MATH 2053 Finite Math, or MATH 2554 Calculus I
WCOB 1033 Data Analysis and Interpretation or STAT 2303 Principles of Statistics

NOTE: It is strongly recommended that economics majors who plan to continue their studies at the graduate level take at least two semesters of calculus (MATH 2554 and MATH 2564) and linear algebra (MATH 3083).

Economics B.A.
Eight-Semester Degree Program
Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for University requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1
3 ENGL 1013 Composition I
3-4 MATH 2053 Finite Math or MATH 2554 Calculus I
3 University/state core fine arts or humanities requirement
3 University/state core US history requirement
3 University/state core social science requirement (not ECON)
15-16 Semester Hours

Spring Semester Year 1
3 ENGL 1023 Composition II
3-4 *MATH 2043 Survey of Calculus or MATH 2564 Calculus II
3 *ECON 2013 Prin. of Microeconomics or ECON 2023 Prin. of Microeconomics
3 University/state core humanities or fine arts requirement (as needed)
4 Science University/state core lecture with corequisite lab requirement
16-17 Semester Hours

Fall Semester Year 2
3 *ECON 2013 Prin. of Microeconomics or *ECON 2023 Prin. of Macroeconomics (as needed)
3 COMM 1313 Public Speaking
6 General Elective
3 WCOB 1033 Data Analysis or STAT 2303 Principles of Statistics
15 Semester Hours

Spring Semester Year 2
3 *Advanced Level Elective
3 *ECON 3033 Microeconomic Theory or ECON 3133 Macroeconomics Theory
6 General Electives
4 Science University/state core lecture with corequisite lab requirement
16 Total Hours

Fall Semester Year 3
3 *ECON 3133 Macroeconomics Theory or *ECON 3033 Microeconomic Theory (as needed)
3 *ECON 3000-4000 level
10 General Electives
16 Semester Hours

Spring Semester Year 3
3 *ECON 4033 History of Economics Thought or *ECON 4743 Introduction to Econometrics
3 *ECON 3000-4000 level
6 General Electives
3 *Advanced Level Elective
15 Semester Hours

Fall Semester Year 4
3 *ECON 3000-4000 level or *ECON 4753 Forecasting (as needed)
3 *ECON 3000-4000 level
10 General Electives
16 Semester Hours

Spring Semester Year 4
3 *ECON 4033 History of Economic Thought or *ECON 4743 Introduction to Econometrics (as needed)
3 *Advanced Level Elective
15-16 Semester Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.
* Students must complete two semesters of DRAM 3001 prior to graduation; however, no more than 2 credits of DRAM 3001 may be taken.

Requirements for a Minor in Drama: A minimum of 18 semester hours in drama, including DRAM 1223 or DRAM 1003 or DRAM 1003H. One of the following courses or course/lab combinations is also required: DRAM 1313 and 1311L, or DRAM 1323 and 1321L, or DRAM 1683. The remaining hours must be selected from courses at the 3000- or 4000-level, the specific courses to be determined by the student in consultation with a drama department faculty adviser. The student must notify the department of his or her intent to minor.

Drama (B.A.) Drama/Speech Teacher Licensure Requirements:
Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

For requirements for the M.A. and M.F.A. degrees in drama, see the Graduate School Catalog.
Requirements for a Major in Economics with Emphasis in International Economics and Business: In addition to the University/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 130 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

30 semester hours of courses, including ECON 2013, ECON 2023, ECON 2033, ECON 3133, ECON 4633, ECON 4643, and 12 hours of international economics and business electives that may be selected from ECON 3843, ECON 3853, ECON 3933, ECON 410V, ECON 468V, MGMT 4583, or other courses approved by the departmental adviser. Course prerequisites for non-economics international business courses will count toward this 12-hour requirement. Thus, if a student wants to take MKGT 4633 Global Marketing as an international economics and business elective, he/she also must take the prerequisite MKGT 3433 Introduction to Marketing Strategy. These two courses will satisfy 6 hours of the elective requirement.

9 hours of upper-division course work in Fulbright College that focuses on a country or region of the world related to the foreign language, which might include upper-division courses in the same language, which should emphasize literature or cultural topics. Courses must be approved by the departmental adviser. Students who meet the requirements of the Fulbright College area studies programs in Asian Studies, Middle East Studies, Latin American and Latino Studies, or European Studies will be considered to have fulfilled this requirement.

MATH 2043 and MATH 2053 or MATH 2554 and MATH 2564.

9 hours of business/stat courses to include WCOB 1033 or STAT 2303, WCOB 1023 (COMM 1313) and 3 hours of WCOB 2013, WCOB 2023, WCOB 2033, WCOB 2043 (students must also complete WCOB 1120 or equivalent and WCOB 1012 as a prerequisite to any of the 2000-level WCOB courses) or ECON 4743 or ECON 4753.

6 hours of a world language at the intermediate level, or above. (This is usually accomplished through completion of a sequence of world language courses: 1013 Elementary I, 2013 Intermediate I and 2013 Intermediate II. Note: 1003 usually will not count toward the 124 hours required for degree credit; see Fulbright College Admission Requirements on page 129 for further details.)

3 hours of upper-division world language in the same language covering business communications, or equivalent. Any student whose minimum 6-hour requirement under (#6) above includes an upper-division course may choose to include business communications among the 6 hours of required University course work in the world language.

NOTE: It is strongly recommended that economics majors who plan to continue their studies at the graduate level take at least two semesters of calculus (MATH 2554 and MATH 2564) and linear algebra (MATH 3083).

Economics B.A. with Emphasis in International Economics and Business Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for University requirements of the program.

Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

3 ENGL 1013 Composition I
3-4 MATH 2053 Finite Math or 2554 Calculus I
1013 Elementary II world language course
2 WCOB 1012 Legal Environment of Business
0 WCOB 1120 Computer Competency Requirement
3 COMM 1313 Public Speaking
0-1 General Elective (if needed to total 15 hours)

15 Semester Hours

Spring Semester Year 1

3 ENG 1023 Composition II
3-4 MATH 2043 Survey of Calculus or MATH 2564 Calculus II
1 ECON 2023 Principles of Microeconomics
3-4 2003 Intermediate I word language course
1 WCOB 1023 Business Foundations
1 General Elective (if needed to total 16 hours)

15 Semester Hours

Fall Semester Year 2

3 2013 Intermediate II world language course
3 ECON 2013 Principles of Macroeconomics
3 WCOB 1033 Business Statistics or STAT 2303 Principles of Statistics
3 WCOB 2013, 2023, 2033, or 2043
3 University/state core US history requirement

15-16 Semester Hours

Spring Semester Year 2

3 † Advanced Level Elective
3 ‡ ECON 3033 Microeconomic Theory or ‡ ECON 3133 Macroeconomic Theory
3 ‡ Upper Division world language
3 University/state core fine arts or humanities requirement
3 University/state core social science requirement (non-ECON course)

15 Semester Hours

Fall Semester Year 3

3 ‡ ECON 3133 Macroeconomic Theory or ‡ ECON 3033 Microeconomic Theory (as needed)
3 ‡ Upper Division world language
3 University/state core humanities or fine arts requirement
4 Science University/state core lecture with corequisite lab requirement
3 General Elective

16 Semester Hours

Spring Semester Year 3

3 ‡ ECON 4633 International Trade
3 ‡ International Economics and Business Elective
3 ‡ Upper Division Foreign Language or 3000+ Fulbright College elective
3 ‡ Upper Level Area Studies from ARSC
4 Science University/state core lecture with corequisite lab requirement

16 Semester Hours

Fall Semester Year 4

3 ‡ ECON 4643 International Macroeconomics and Finance
3 ‡ International Economics and Business Elective
3 ‡ International Economics and Business Elective
3 ‡ Upper Level Area Studies from ARSC
4 General Electives

16 Semester Hours

Spring Semester Year 4

3 ‡ International Economics and Business Elective
3 ‡ Upper Level Area Studies from ARSC
10 General Electives

16 Semester Hours

124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Writing Requirement: The Fulbright College writing requirement for economics majors will be fulfilled by the research/analytical paper required in ECON 4033.
For economics majors who elect to emphasize international economics and business, the writing requirement will be fulfilled by the research/analytical paper required in ECON 4633 or 4643.

Requirements for Departmental Honors in Economics: The Departmental Honors program provides upper-division students the opportunity to engage in independent study or research under the guidance of an individual member of the faculty. In addition to satisfying the general college requirements for the bachelor's degree with honors, honors candidates in economics are required to complete and orally defend an honors thesis based upon independent study under ECON 399VH (for 3 to 6 hours) and to have a minimum grade-point average of 3.5. Outstanding student achievement will be recognized by awarding the bachelor's degree with the distinction "Economics Scholar Cum Laude." Higher distinctions may be awarded to truly outstanding students based upon the whole of their academic program and quality of honors research.

Some courses in the Walton College of Business are given credit toward an economics major for the B.A. degree. See departmental adviser for designation.

For the combined major in economics and African and African American studies, see page 131.

Requirements for a Minor in Economics: 18 hours in economics. Required courses are ECON 3033 Microeconomic Theory, and ECON 3133 Macroeconomic Theory, plus 12 additional hours in economics, six of which must be in courses numbered 3000 or above.

NOTE: ECON 2013 and/or ECON 2023, or ECON 2143, are prerequisites to all economics courses numbered above 3000.

Economics (B.A.) Social Studies Teacher Licensure Requirements:
Please refer to the Secondary Education Requirements for Fulbright College Students on page 125. Students wanting to teach social studies in middle school should consult with a middle level adviser in the College of Education and Health Professions.

See Page 344 for Economics (ECON) courses

ENGLISH (ENGL)

Dorothy Stephens
Chair of the Department
338 Kimpel Hall
479-575-4301
http://www.uark.edu/depts/english/
English@cavern.uark.edu

FACULTY
• Distinguished Professor Emeritus Guilds
• University Professors Emeriti Harrison, Williams
• Professors Adams, Booker, Burris, Candido, Cochran, DuVal, Giles, Hays, Heffernan, Jolliffe, Montgomery, Quinn (W.), Roberts, Stephens
• Professors Emeriti Bennett, Bolsterli, Hart, Rudolph
• Visiting Professor Madison (R.)
• Associate Professors Brock, Dominguez Barajas, Gilchrist, Kahf, Marran, McCombs, Slattery
• Associate Professors Emeriti MacRae, Park
• Assistant Professors Fagan, Hinrichsen, Kayser, Sexton, Smith
• Visiting Assistant Professors Dempsey, Viswanathan
• Adjunct Assistant Professor Gertz
• Instructors Al Amrani, Bain, Gamble, Gray, Harrington, Hutton, Kuilan, Lewis, Lyons, Madison (K.), McGee-Anderson, Nickol, Parette, Quinn (E.), Rankin, Shchegoleva, Sparks, Walker, Wong

The Department of English offers a major in English, a minor in English, and a combined major in English and Journalism.

The major in English is suitable for many purposes, both professional and cultural. By properly selecting courses, the student may prepare for postgraduate work in literature and language; meet the English requirements for secondary teaching licensure; develop writing skills, both in creative and in expository writing; obtain appropriate pre-professional training for areas such as law; or study broadly in the literary culture of English-speaking peoples. A rich variety of courses is offered, and there is opportunity within the major for any student to explore areas of special interest: for example, American literature, the Renaissance, drama, the English language, and modern and contemporary literature.

Requirements for a Major in English: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under Fulbright College Academic Regulations and Degree Completion Policy), the following course requirements must be met.

Bolded course(s) from the list below may be applied to portions of the University/state minimum core requirements.

English majors are required to complete the following:
The 35-hour University core
PHIL 2003 Introduction to Philosophy
Any world language at the 2013 Intermediate II level. (This is usually accomplished through completion of a sequence of three world language courses: 1013, 2003 and 2013. NOTE: 1003 usually will not count toward the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)
WLIT 1113 World Literature I and WLIT 1123 World Literature II
36 semester hours (not counting ENGL 0003, ENGL 1013, ENGL 1023, and ENGL 2003). These hours must include 12 hours of survey courses, including ENGL 2303; either ENGL 2313 or ENGL 2323; either ENGL 2343 or ENGL 2353; and one additional survey course chosen from ENGL 2313, ENGL 2323, ENGL 2343, and ENGL 2353. Majors must take an additional 12 hours that include ENGL 4303; one of ENGL 3713, ENGL 3723, and ENGL 3733; either ENGL 3743 or ENGL 3753; and one of ENGL 3833, ENGL 3843, ENGL 3853, and ENGL 3863. The remaining twelve hours can be taken in any English course numbered above 3000, with the stipulation that at least six of these hours must be numbered above 4000.

All English majors are strongly encouraged to complete a minor or a second major in one of the following: African and African American Studies, Anthropology, Art History, Classical Studies, Communication, Drama, European Studies, Gender Studies, History, Journalism, Latin American Studies, Legal Studies, Medieval and Renaissance Studies, Middle East Studies, Music, Philosophy, Political Science, Psychology, Religious Studies, or in a world language (Arabic, French, German, Japanese, Russian, Spanish or any other language that offers a minor).

English majors are strongly encouraged to fill their elective hours with courses from the departments or programs of study listed above.

English B.A.

Eight-Semester Degree Program
Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1
3  ENGL 1013 Composition I
3  MATH 1203 (if required) or or any higher-level math
3  WLT 1113 World Literature I
3  1013 Elementary II world language course or higher (depending on placement in sequence)
3  University/state core fine arts or US history course requirement
15  Semester Hours

Spring Semester Year 1
3  ENGL 1023 Composition II
3  2003 Intermediate I world language course (or higher)
3  WLT 1123 World Literature II
3  University/state core social science requirement
4  Science University/state core lecture with corequisite lab requirement
16  Semester Hours
## Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1003</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1013</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1023</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1033</td>
<td>3</td>
</tr>
<tr>
<td>WLT 1113</td>
<td>3</td>
</tr>
<tr>
<td>WLT 1123</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 15 Semester Hours

---

## Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL from Group A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL from Group B or C</td>
<td>3</td>
</tr>
<tr>
<td>University/state core US history or fine arts requirement</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 12 Semester Hours

---

## Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 2313</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2323</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2333</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2343</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2353</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2363</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 15 Semester Hours

---

## Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL from Group A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL from Group B or C</td>
<td>3</td>
</tr>
<tr>
<td>University/state core social science requirement</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 12 Semester Hours

---

## Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL from Group A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL from Group B or C</td>
<td>3</td>
</tr>
<tr>
<td>University/state core US history or fine arts requirement</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 15 Semester Hours

---

## Writing Requirement

All upper-division English courses require a research or an analytical paper except ENGL 4003 and the courses in creative writing (ENGL 3013, ENGL 4013, ENGL 4023, ENGL 4073). For this reason all students who fulfill the requirements for a major in English thereby fulfill the Fulbright College writing requirement.

**Requirements for a Major with a Concentration in Creative Writing:** In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded course(s) from the list below may be applied to portions of the University/state minimum core requirements.

English majors are required to complete the following:

- The 35-hour University core
- PHIL 2003 Introduction to Philosophy

Any world language at the 2013 Intermediate II level (This is usually accomplished through completion of a sequence of three world language courses: 1013, 2013 and 2003, NOTE: 1003 usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)

- WLT 1113 World Literature I
- WLT 1123 World Literature II

6 semester hours (not counting ENGL 0003, ENGL 1013, ENGL 1023, and ENGL 2003) to include three hours of ENGL 3203 Poetry; three hours of ENGL 3213 Fiction; three hours of ENGL 2023 Creative Writing I; three hours of ENGL 3013 Creative Writing II; three hours of ENGL 4013 Undergraduate Poetry Workshop or ENGL 4023 Undergraduate Fiction Workshop; twelve hours of survey courses (three hours of ENGL 2303, and nine hours from ENGL 2313, ENGL 2323, ENGL 2343, and ENGL 2353); three hours of ENGL 4303 Introduction to Shakespeare; and six additional hours chosen from ENGL courses numbered above 3000 and WLT courses numbered above 2333.

---

## English B.A. with a Concentration in Creative Writing

### Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

---

### Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1013</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1203</td>
<td>3</td>
</tr>
<tr>
<td>WLT 1113</td>
<td>3</td>
</tr>
<tr>
<td>WLT 1123</td>
<td>3</td>
</tr>
<tr>
<td>University/state core fine arts or U.S. history course requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 15 Semester Hours

---

### Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 2003</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2013</td>
<td>3</td>
</tr>
<tr>
<td>WLT 1113 World language course (or higher)</td>
<td>3</td>
</tr>
<tr>
<td>University/state core social science requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 16 Semester Hours

---

### Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL from Group A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL from Group A or General Elective</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Level Elective</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 2003 Intro to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>University/state core US history or fine arts requirement</td>
<td>3</td>
</tr>
<tr>
<td>University/state core social science requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 15 Semester Hours

---

### Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL from Group A</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Level Elective</td>
<td>3</td>
</tr>
<tr>
<td>University/state core US history or fine arts requirement</td>
<td>3</td>
</tr>
<tr>
<td>University/state core social science requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 15 Semester Hours

---

### Group A: Twelve hours chosen from the following:

- ENGL 2303 Survey of English Literature from Beginning through 17th Century (required)
- ENGL 2313 Survey of English Literature from 1700 to 1900
- ENGL 2323 Survey of Modern British, Irish, and Postcolonial Literature
- ENGL 2333 Survey of American Literature from the Colonial Period through Naturalism
- ENGL 2343 Survey of Modern American Literature
- ENGL 2353 Survey of Modern American Literature

**Total Hours:** 15 Semester Hours

---

### Group B: Twelve hours chosen from the following:

- ENGL 3713 Topics in Medieval Literature and Culture
- ENGL 3723 Topics in Renaissance Literature and Culture
- ENGL 3733 Topics in Restoration and 18th Century Literature
- ENGL 3743 Topics in 19th Century British Literature and Culture
- ENGL 3753 Topics in Modern British Literature
- ENGL 3833 Topics in American Literature and Culture to 1900
- ENGL 3843 Topics in Modern American Literature and Culture
- ENGL 3853 Topics in African-American Literature and Culture
- ENGL 3863 Topics in Literature and Culture of the American South
- ENGL 4303 Introduction to Shakespeare (required)

**Total Hours:** 124 Total Hours

---

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 3013</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4013</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4023</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4073</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 124 Total Hours

---

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 3013</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4013</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4023</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4073</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 124 Total Hours

---

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 3013</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4013</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4023</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 4073</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science University/state core lecture with corequisite lab requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 124 Total Hours

---

### Group C: Twelve additional hours in English courses numbered above 3000, at least six of which must be numbered above 4000.
Dates who complete the honors program with merit will graduate with the distinction of "English Scholar Cum Laude." The distinctions of Magna Cum Laude and Summa Cum Laude will be awarded only for exceptional work and will be based on the candidate's entire honors program.

Requirements for a Minor in English: 18 hours of English (not counting ENGL 0003, ENGL 1013, ENGL 1023, and ENGL 2003) to include any nine hours of survey courses (chosen from ENGL 2303, ENGL 2313, ENGL 2323, ENGL 2343, and ENGL 2353) and nine additional hours chosen from English courses numbered above 3000 and WLIT courses above 2333.

Requirements for a Combined Major in English and Journalism: The Department of English and the Department of Journalism offer a combined major in English and Journalism. Please refer to the Department of Journalism for the specific course requirements and eight-semester degree program for the combined major.

Assessment Requirement: Every senior English major must take the program assessment exam administered by the department each spring semester to graduate. Exam results will not affect GPA, although the student’s score will be noted on his or her permanent academic record. This requirement may be waived in extraordinary circumstances by the department’s Director of Undergraduate Studies. Contact your adviser for more information.

English (B.A.) Teacher Licensure Requirements: Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

Students wanting to teach English in middle school should consult with a middle-level adviser in the College of Education and Health Professions.

See Page 349 for English (ENGL) courses

EUROPEAN STUDIES (EUST)

Fiona Davidson
Director of Studies
108 Ozark Hall
479-575-3879
http://eust.ou.edu

FACULTY

- Professors Booker (English), Burriss (English), Candido (English), Dixon (geography), DuVal (English), Finlay (history), Gay (economics), Heffernan (English), Kelley (political science), Montgomery (English), Pritchett (Spanish), Purvis (journalism and political science), Stephens (English)
- Associate Professors Adler (philosophy), Arenberg (French), Bailey (communication), Christiansen (French), Condray (German), Davidson (geography), Jacobs (art), Minar (philosophy), Scheide (communication), Senor (philosophy), Sonn (history), Starks (history)
- Assistant Professors Antoy (history), Brogi (history), Comfort (French), Grob-Fitzgibbon (history), Hare (history), Hoyer (German), Rozier (Italian), Ruiz (Spanish), Sexton (English), Witherbee (English)

Courses are offered in European studies, broadly defined as the study of the geography, culture, history, language, and politics of central Europe, including the British Isles.

Students wishing to maximize their knowledge of European studies and wishing to prepare for graduate training and/or employment in the private sector or government in positions related to the area may earn a combined major in European studies together with a major in another discipline. Students are required to coordinate their academic programs with their advisers in the major department and with the director of the European Studies program. New students entering the program are required to notify both the major adviser and the director of studies of their intention to participate. Freshmen and sophomores considering this program are advised to begin their study of an appropriate foreign language as early as possible.

Requirements for a Combined Major in European Studies – In addition to the requirements of a primary departmental major, students pursuing a combined major in European Studies must complete the following:

Language Requirement: Students must complete the equivalent of a third year...
of a modern European language, e.g., six hours of advanced 3000- or 4000-level work in French, German, or Spanish. Less commonly taught languages such as Portuguese, Russian, or Italian may be used, subject to the availability of courses. Three to six hours in an approved study abroad program in Europe may substitute for all or part of this requirement. For native speakers of a European language other than English, this requirement is waived.

Introduction to Europe: Students must complete EUST 2013 Introduction to Europe, preferably before taking the colloquium.

European Studies Colloquium: Students must complete three to six hours of EUST 4003 European Studies Colloquium.

Study Abroad: Students who major in European Studies are required to spend at least one semester (Fall or Spring) in an approved international program. Students with a modern European language as their combined major (or minor) may (but are not required to) choose a program in the country of their language specialization. Students without a language combined major or minor are required to attend the University of Arkansas Rome Program for at least one semester. At least 9 and a maximum of 18 hours of credit towards the EUST major may be earned during study abroad. Exemptions to this requirement will be considered on a case-by-case basis and will be considered only 1) if the student has a compelling academic reason for conducting study abroad in another European country or b) if the student can demonstrate that the semester abroad requirement would entail significant personal or financial hardship.

In order to facilitate student preparation for study abroad, an additional fee will be assessed for EUST students after they declare the major. The fee will be assessed for either four semesters or until the student has completed their study abroad program, whichever period of time is shorter. The purpose of the fee is to help defray the costs of whatever study abroad program the student chooses to attend. Students will be exempt from this fee if they have already completed their study abroad requirement before declaring the EUST major.

Electives: Students must complete at least 18 hours of credit, in addition to the language requirement and the European studies colloquium, from among the following or in individualized studies under the direction of faculty participating in the program. Students choosing to take individualized reading or directed research courses as part of the major or minor must obtain the approval of the director of the area studies program and their major adviser. In addition, the following conditions apply: 1. A maximum of nine hours may be submitted from any one department, and 2. A maximum of six hours may be submitted from courses taken in the student’s major department.

The following courses may be taken in fulfillment of elective requirements:

Art History
ARHS 4873 Baroque Art
ARHS 4883 18th and 19th Century European Art
ARHS 4893 20th Century European Art

English
Any 3000- or 4000-level course in 18th, 19th, or 20th century British, Irish, Scots, or continental literature, any comparative literature course with significant European content.

Foreign Languages
Any 3000- or 4000-level French, German, Italian, Russian or peninsular Spanish literature or civilization course.

Geography
GEOG 4243 Political Geography
GEOG 4783 Geography of Europe

History
HIST 3443 Modern Imperialism
HIST 3533 World War II
HIST 3553 Russia Since 1861
HIST 3683 Europe in the 19th Century
HIST 3693 Europe in the 20th Century
HIST 4133 Society and Gender in Modern Europe
HIST 4143 Intellectual History of Europe Since the Enlightenment
HIST 4183 Great Britain 1707-1901
HIST 4193 Great Britain 1901-2001
HIST 4213 The Era of the French Revolution
HIST 4223 France Since 1815

HIST 4243 Germany 1789-1918
HIST 4253 Germany, 1918-1945

Music History
MUHS 3703 History of Music to 1750
MUHS 3713 History of Music from 1750 to Present
MUHS 4253 Special Topics in Music History (depending on topic)

Philosophy
PHIL 4033 Modern Philosophy - 17th and 18th Centuries
PHIL 4043 19th Century Continental Philosophy
PHIL 4063 20th Century Continental Philosophy
PHIL 4073 History of Analytic Philosophy

Political Science
PLSC 4563 Government and Politics of Russia
PLSC 4803 Foreign Policy Analysis

Requirements for a Minor in European Studies: Students wishing to minor in European studies must fulfill the EUST 2013 Introduction to Europe and EUST 4003 Colloquium requirements and the language requirements described below. Students choosing to take individualized reading or directed research courses as part of the major or minor must obtain the approval of the director of the area studies program and their major adviser. In addition, the following conditions apply: 1. A maximum of nine hours may be submitted from any one department, and 2. A maximum of six hours may be submitted from courses taken in the student’s major department.

Study Abroad for Minors: Students wishing to minor in EUST will be required to participate in a European study abroad program of at least 3 weeks duration. Exemptions to this requirement will be considered on the same basis as exemptions to the study abroad requirement for the major.

Requirements for Honors in EUST: The Honors Program in European Studies gives junior and senior students of high ability the opportunity to enroll in enriched courses and conduct independent research culminating in an honors thesis. In addition to satisfying the general Fulbright College requirements for graduation and the basic eligibility requirements for honors as established by the Honors Council, candidates for honors in European Studies must complete 12 hours of honors credit in partial satisfaction of requirements for the co-major. One to six of these may be thesis hours (EUST 399VH). The preferred method for satisfying the remaining hours is to enroll in the colloquium at least once for honors credit (EUST 4003H) and to take relevant honors colloquia or graduate courses (with permission) in one of the departments contributing to this interdisciplinary area study. The thesis committee shall include a representative from the major discipline (in the case of multiple majors, from the discipline contributing most significantly to the topic). Successful completion of these requirements will be recognized by the award of the distinction "European Studies Scholar Cum Laude" at graduation. Higher degree distinctions are recommended only in exceptional cases and are based upon the whole of the candidate’s program of honors studies.

FOREIGN LANGUAGES
See World Languages, Literatures, and Cultures on Page 200.

FULBRIGHT INSTITUTE OF INTERNATIONAL RELATIONS (IREL)

Charles H. Adams
Interim Director of the Institute
525 Old Main
479-575-4804
http://www.uark.edu/depts/plscinfo//fiir/index_fiir.php

The Fulbright Institute of International Relations is a center for study, research, and analysis of foreign policy and international affairs within the J. William Fulbright College of Arts and Sciences. The institute honors J. William Fulbright for his leadership in international relations and his lasting contributions to international education.
and better understanding among nations. In addition to instructional and research activities, the institute serves as a medium for international scholarly exchange and study programs, and sponsors conferences, seminars, public events, and publications on international relations.

GENDER STUDIES (GNST)

Susan Marren
Chair of Studies
333 Kimpel Hall
479-575-4301

FACULTY
- Professors Coon, Gordon, Parry, Robinson, Schneider, Sonn, Stephens, Swedenburg, Zajicek
- Associate Professors Amason, D’Alisera, Erickson, Fredrick, House, Kahf, Marren, Starks
- Assistant Professors Arrington, Billings, Corrigan

The gender studies minor introduces students to the ways that various academic disciplines have examined women’s and men’s differing participation in work, the family, political systems, and creative endeavors. Courses explore sex and gender differences and such concepts as masculinity and femininity, essence and performance; distributions of power, work, and resources; and the symbolic representation of gender and identity in literature, religion, and art. The minor is often chosen by students interested in investigating materials previously neglected by scholars and in fresh perspectives on traditional subject matter.

Requirements for a Minor in Gender Studies: The student must complete 15 credit hours of regular courses listed below or special topics and seminars found in each semester’s schedule of classes under Gender Studies, including HUMN 2003 Introduction to Gender Studies:

- ANTH 3163 Male and Female
- ANTH 3523 Gender and Politics in Latin America
- CLST 4003H Rome on Film
- COMM 3433 Family Communication
- COMM 3983H Honors Communication and Gender
- HIST 3903 Women and Christianity
- HIST 3923H Honors Colloquium: The History of Sex/Sexuality in America
- HIST 3923H Honors Colloquium: Russian and Soviet Women
- HIST 4133 Society and Gender in Modern Europe
- HIST 4413 New Women in the Middle East
- HUMN 2003 Intro. to Gender Studies
- HUMN 3923H Honors Intro. to Gender Studies
- LAST 4003 Latina Writers
- PLSC 4573 Gender and Politics
- SOCI 4133 The Family
- WLIT 3983 Special Studies: Women and Arabic Literature

Earth Science (ERSC)

Fulbright College offers a major in earth science leading to the Bachelor of Science degree. Prospective secondary teachers may plan a program, in cooperation with the College of Education, which will satisfy the teacher licensure requirements. Students interested in environmental problems, teaching earth science in public schools, or wishing to pursue graduate work in either geography or geology will obtain much of the necessary foundation through this degree. Because the program outlined below lists only minimum science requirements, it is expected that most students will use some of their elective credit hours to strengthen their mathematics and science backgrounds in areas other than geography and geology. These areas of additional study will be determined through consultation between the student and the adviser. Students interested in this major should contact either Professor Ralph Davis or Professor J.C. Dixon.

Requirements for the B.S. Degree with a Major in Earth Science: In addition to the University/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

<table>
<thead>
<tr>
<th>Basic Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry or Physics</td>
<td>8</td>
</tr>
<tr>
<td>GEOL 1133/1111L</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 1133/1131L</td>
<td>4</td>
</tr>
<tr>
<td>MATH (2043, 2053, 2183 or 2554)</td>
<td>3-4</td>
</tr>
</tbody>
</table>

6 hours in a single world language at the 1013 Elementary II level or higher. (World language courses taken are dependent on placement level in sequence. NOTE: 1003, if required, usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)

<table>
<thead>
<tr>
<th>Advanced Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 3003, GEOG 3023, GEOG 4353 or GEOG 4363</td>
<td>9</td>
</tr>
<tr>
<td>GEOL 2313, GEOL 3413, GEOL 4033 and GEOL 4924</td>
<td>13</td>
</tr>
<tr>
<td>At least 6 additional hours, at the 3000 level or above, in either geography or geology.</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Hours (depending on choice of MATH by student) 65-66

Writing Requirement: The college writing requirement is to be met by comple-
Earth Science Requirements:

Students wanting to teach science in middle or secondary school should consult with an adviser in the College of Education and Health Professions.

Earth Science B.S.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

3 ENGL 1013 Composition I
3-4 MATH 2013 (If required) or MATH 2043, 2053, 2183 or 2554
4 GEOL 1111/1111L General Geology
3 1013 Elementary II world language course (or higher level)
3 University/state core US History requirement
16-17 Total Hours

Spring Semester Year 1

3 ENGL 1023 Composition II
3-4 MATH 2043, 2053, 2183, 2554 (If needed) or General Elective
4 GEOL 1133/1133L Environmental Geology
3 2003 Intermediate I world language course (or higher level)
3 University/state core fine arts or humanities course requirement
16-17 Total Hours

Fall Semester Year 2

4 GEOL 2313 Mineralogy and Petrology
4 CHEM or PHYS Course (as needed)
3 University/state core humanities or fine arts course requirement (as needed)
3 University/state core social science requirement
3 General Elective
16 Total Hours

Spring Semester Year 2

3 ††GEOL 3413 Sedimentary Rocks & Fossils
3 †Advanced Level Elective
4 ASTR 2003/2001L
4 CHEM or PHYS Course (as needed)
3 University/state core social science requirement
17 Total Hours

Fall Semester Year 3

4 BIOL Course (as needed)
3 ††GEOL 3023 Cartography
3 University/state core social science requirement
3 †Advanced Level Elective
3 †Advanced Level Elective
16 Total Hours

Spring Semester Year 3

4 BIOL Course (as needed)
3 ††GEOL 3003 Conservation of Natural Resources
3 General Elective
3 ††GEOL 4033 Hydrogeology
13 Total Hours

Fall Semester Year 4

3 ††GEOL 4553 Elements of Weather (as needed) or †Advanced Level Elective
3 †Upper Level GEOG, GEOL, or GEOH Course
6 General Electives
3 †3000-plus Level Elective
15 Total Hours

Spring Semester Year 4

4 ††GEOL 4924 Earth System History
3 ††GEOL 4363 Climatology (as needed) or †Advanced Level Elective
3 †Upper Level GEOP, GEOL, or GEOH Course
3 †3000-plus Level Elective
0-2 General Electives as needed
13-15 Semester Hours
124 Total Hours

Geography (GEOG)

Undergraduates who wish to major in geography should identify themselves to the department as soon as possible in order that they may develop a meaningful sequence of courses and take part in departmental activities. Two types of undergraduate programs with concentrations in geography are described below. Those interested in the graduate program should consult the Graduate School Catalog.

Requirements for a Major in Geography:

In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

3 – GEOL 1123
3 – GEOL 2003
8 – GEOL 1113/1111L and GEOL 1133/1131L
6 – Six hours in a single world language at the 1013 Elementary II level or higher. (World language courses taken are dependent on placement level in sequence. NOTE: 1003, if required, usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)
3 – GEOS 3023

In addition, students must complete a minimum of 15 hours of GEOG at the 3000-level or above, with a balance between regional and topical courses. Students who expect to enter graduate school are encouraged to register for GEOG 410V their senior year. Electives in closely related fields are considered a part of the program and, upon prior approval of the department, six hours may be counted toward the major. Those planning to teach in secondary schools should note that they can both earn their degree in geography and quality for a teaching certificate; they should consult with the department as early as possible.

Writing Requirement: The college writing requirement is to be met by completion of a term paper deemed satisfactory by the student’s adviser and instructor of an upper-level geography course. The college writing requirement may also be met by the completion of an honors thesis.

Geography B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

3 GEOS 1123 Human Geography
3 ENGL 1013 Composition I
3-4 MATH 1203 College Algebra or any higher level math
3 1013 Elementary II world language course
3 University/state core fine arts, humanities or U.S. history requirement
15-16 Semester Hours

Spring Semester Year 1

4 GEOL 1113/1111L General Geology
3 ENGL 1023 Composition II
3 2003 Intermediate I world language course (or higher)
addition to the classes required if the student's career path is in Historic Preservation. Cartography/Remote Sensing GIS Specialization: This program gives students an opportunity to develop expertise in (1) cartography, map design and computer- assisted map production, (2) remote sensing and image interpretation, including photogrammetric systems, sensor systems, and digital image processing, and (3) geographic information systems, including data sources, analytical techniques, and hardware/software systems.

To complete the specialization, a student is required to fulfill certain course requirements.

Required courses (9 hours):
- GEOG 3023, GEOS 4413, and GEOS 3543 (same as ANTH 3543).
- Elective courses (9 hours to be selected from the following):
  - GEOS 4523, GEOG 4543, GEOG 4553 (same as ANTH 4553), GEOS 4583 (same as ANTH 4563), GEOS 4593 (same as ANTH 4593), STAT 4003 (or other approved statistics course), CVEG 2053 (or other approved surveying course).

Requirements for Departmental Honors in Geography: Admission to the Departmental Honors Program in Geography is open to geography majors with a minimum grade-point average of 3.5 in all their work. All honors candidates must take 12 hours, which may include 6 hours of thesis, in Honors Studies. During the fall semester of either the junior or senior year the candidate will enroll in GEOG 399VH (no more than three hours of credit), an undergraduate seminar in geographical philosophy and methodology. During the senior year the honors candidate will complete the program by writing a senior honors paper under GEOG 399VH (no more than three hours of credit). Successful completion of the requirements will be recognized by the award of the distinction "Geography Scholar Cum Laude" at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate's program of honors studies.

Geography (B.A.) Social Studies Teacher Licensure:
Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

Students wanting to teach social studies in middle school should consult with a middle level adviser in the College of Education and Health Professions.

### See Page 355 for Geography (GEOG) courses

### Geology (GEOL)

The department of geosciences offers the Bachelor of Science degree in geology and the Bachelor of Science degree in earth science. It is emphasized that students wishing to become practicing professional geologists should hold the Bachelor of Science degree in geology at a minimum. It is further recognized that practicing professional geologists typically hold a Master of Science degree. The education of students pursuing the Bachelor of Science in earth science degree should reflect general education in the liberal arts with emphasis in geology. The goal of the program leading to the Bachelor of Science degree in geology is to provide students with a broad spectrum of the various subdisciplines of geology, while at the same time honoring an emphasis in the traditional areas of mineralogy, igneous, metamorphic and sedimentary petrology, structural geology and stratigraphic principles. This curriculum will prepare students to enter graduate programs without deficiencies at the University of Arkansas or other established programs.

### Requirements for a Major in Geology leading to the B.S. Degree: In addition to the University/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

- **6** – Six hours in a single world language at the 1013 Elementary II level or higher. (World language courses taken are dependent on placement level in sequence. NOTE: 1003, if required, usually will not count towards the 124
hours required for degree credit; see College Admission Requirements on page 129 for further details.)

3 – Three hours of upper-level science as approved by adviser

And a minimum of 40 semester hours of GEOL, GEOG or GEOS courses to include:

GEOL 1113/1111L (or GEOL 3002), GEOL 1133/1131L, GEOL 2313, GEOL 3383, GEOL 3413, GEOL 3514, GEOL 4223, GEOL 4063 or GEOL 4433, GEOL 4863, GEOL 4924, GEOL 4666, and an additional 9 hours of geology courses selected from GEOL or GEOS courses numbered 3000 or higher.

Writing Requirement: A scholarly writing assignment will be included in all geology courses numbered 2000 and above. Those papers submitted in geology courses 3000 and above will fulfill the Fulbright College writing requirement. The college writing requirement may also be met by the completion of an honors thesis.

Geology B.S.

Nine-Semester Degree Program

Students wishing to follow the nine-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

This program does require a summer field camp after the junior year.

Fall Semester Year 1

3 ENGL 1013 Composition I
4 †MATH 2554 Calculus I
2-4 GEOL 1113/1111L General Geology/Lab or ††GEOL 3002 Geology for Engineers
4 CHEM 1103/1101L University Chemistry I/Lab
3 1013 Elementary II world language course (or higher, depending on placement)
16-18 Semester Hours

Spring Semester Year 1

3 ENGL 1023 Composition II
4 †MATH 2564 Calculus II
4 GEOL 1133/1131L Environmental Geology/Lab
4 CHEM 1123/1121L University Chemistry II/Lab
3 2003 Intermediate I world language course (or higher level)
18 Semester Hours

Fall Semester Year 2

3 †GEOL 2313 Mineralogy and Petrology
4 PHYS 2054 University Physics II/Lab or PHYS 2033/2031 College Physics II/Lab
3 University/state core US history course
3 University/state core social science requirement
3 General Elective
16 Semester Hours

Spring Semester Year 2

3 †GEOL 3413 Sedimentary Rocks and Fossils
4 PHYS 2074 University Physics II/Lab or PHYS 2033/2031 College Physics II/Lab
3 University/state core fine arts or humanities requirement
3 University/state core social science requirement
3 General Elective
16 Semester Hours

Fall Semester Year 3

3 †GEOL 3383 Principles of Landscape Evolution/Lab
4 †GEOL 3514 Structural Geology
3 General Elective
3 University/state core humanities or fine arts requirement (as needed)
3 University/state core social science requirement
16 Semester Hours

Spring Semester Year 3

3 †GEOL 4223 Stratigraphy and Sedimentation/Lab
3 †GEOL 4863 Geological Data Analysis/Lab
6 General Electives
12 Semester Hours

Summer Semester Year 3

6 † GEOL 4666 Geology Field Camp (Summer Session 1–1st 6 weeks)

Fall Semester Year 4

3 †GEOL 4063 Principles of Geochemistry/Lab or GEOL 4433 Geophysics/Lab
6 †GEOL or GEOS electives numbered 3000 or above
3 General Elective
12 Semester Hours

Spring Semester Year 4

4 †GEOL 4924 Earth System History (senior capstone course)
6 †GEOL or GEOS electives numbered 3000 or above
6 General Electives
16 Semester Hours

124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter

†† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Requirements for a Minor in Geology: A minor in geology shall be awarded upon completion of the following course work: GEOL 1133/1131L (or 3002), GEOL 1133/1131L, GEOL 2313, two courses at the 3000-level, and one course at the 4000 level. Students are advised to consult with a geology faculty member to develop the coursework program that best complements their major area of study.

Requirements for Departmental Honors in Geology: The Departmental Honors Program in Geology provides upper-division undergraduate students with an opportunity to formally participate in geologic research activities. Honors candidates carry out independent study and research under the guidance of the geology faculty. Outstanding student achievement will be recognized by awarding the distinction “Geology Scholar Cum Laude” at graduation. Higher degree distinctions may be awarded to truly outstanding students based upon the whole of their academic program and quality of honors research. Honors candidates in geology must do the following:

1. Satisfy departmental and college requirements for a bachelor's degree with honors.
2. Become a candidate no later than the second semester of their junior year.
3. Enroll in six hours of honors research GEOL 3901, GEOL 3911, GEOL 4922, GEOL 4932.
4. Take 12 hours in Honors Studies, which may include 6 hours of thesis.
5. Complete junior and senior honors courses GEOL 3901, GEOL 3911, GEOL 4922, GEOL 4932, and
6. Achieve a cumulative grade-point average of 3.30 in geology courses.

Geology (B.S.) Teacher Licensure in Life/Earth Science or Physical/Earth Science Requirements: Students wanting to teach science in middle or secondary school should consult with an adviser in the College of Education and Health Professions. For requirements for the M.S. degree in geology, see the Graduate School Catalog.

See Page 356 for Geology (GEOL) courses

HISTORY (HIST)

Lynda Coon
Chair of the Department
416 Old Main
479-575-3001
http://history.uark.edu
history@uark.edu

FACULTY
- Distinguished Professors Sutherland, West, Woods
- Professors Brogi, Coon, Finlay, Gordon, Markham, McMahan, Robinson, Sonn, Whayne, Wolpert
- Professors Emeriti Brown, Bukey, Chase, Engels, Kennedy, Tsai
- Associate Professors Grob-Fitzgibbon, Pierce, Schweiger, Sloan (K.), Starks, Williams
• Associate Professors Emeriti Edwards, Sloan (D), Tucker
• Assistant Professors Antov, Arrington, Cai, Gigantino, Hare, White

Requirements for a Major in History: Minimum of 45 semester hours to include:
Any World Language at the Intermediate II 2013 level. (This is usually accomplished through completion of a sequence of three language courses: 1013, 2003 and 2013. NOTE: 1003 usually will not count towards the 124 hours required for degree credit; see Fulbright College Admission Requirements on page 129 for further details.)
3 hours from the following list of introductory courses in area studies programs:
- AAST 1003, Introduction to African American Studies
- AMST 2003, Introduction to American Studies
- CLST 1003, Introduction to Classical Studies (Greece)
- CLST 1013, Introduction to Classical Studies (Rome)
- EUST 2013, Introduction to European Studies
- IREL 2813, Introduction to International Relations
- LAST 2013, Introduction to Latin American Studies
- MEST 2013, Introduction to Middle East Studies
- HIST 1113 or HIST 1113H
- HIST 1123 or HIST 1123H (4-year honors scholars must take 1113H and 1123H)
- HIST 2003
- HIST 2013
27 additional hours in history courses numbered 3000 or above to include:
- HIST 4893. At least 15 of these hours must be 4000 or above. Students may not receive credit for both HIST 3383 and HIST 4583.
- Students must select 3 hours from each of the following groups:

  **Group 1: Europe, including Britain and Russia**
  - HIST 3003, HIST 3063, HIST 3083, HIST 3443, HIST 3453, HIST 3533, HIST 3543, HIST 3553, HIST 3683, HIST 3693, HIST 4003, HIST 4013, HIST 4023, HIST 4043, HIST 4053, HIST 4073, HIST 4083, HIST 4133, HIST 4143, HIST 4153, HIST 4163, HIST 4183, HIST 4193, HIST 4213, HIST 4223, HIST 4243, HIST 4253, HIST 4793.

  **Group 2: Africa, Asia, Latin America, Middle East, Near East, Russia**

  **Group 3: United States**

Courses listed in more than one group may fulfill only one group requirement. In consultation with an adviser, students who are history majors are encouraged to design a program of study with both breadth and depth.

History majors are strongly encouraged, but not required, to take a minor or combined major in one of the following:
- African and African American Studies
- American Studies
- Art History
- Asian Studies
- Classical Studies
- European Studies
- Gender Studies
- International Relations
- Latin American and Latino Studies

Medieval and Renaissance Studies
Middle East Studies
Religious Studies
World Languages, Literatures, and Culture

Writing Requirements: To fulfill the Fulbright College writing requirement, each history major will submit, prior to graduation, a substantial research or analytical paper, a thesis and a full-length dissertation. Prospective Departmental Honors students must take 12 hours in Honors Studies, of which 6 hours must include:
- HIST 3973H Honors Methods (Spring semester, junior year) and
- HIST 399VH, Honors History Thesis (Fall or Spring semester, senior year). During the senior year, the honors candidate will complete the program by writing and defending a thesis or dissertation. Successful completion of the program will be recognized by the award of the distinction “History Scholar Cum Laude” at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based on the candidate’s entire program of honors studies.

History B.A.
Eight-Semester Degree Program
Students who elect to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. State/University Core and world language requirement hours may vary by individual, based on placement and previous credit granted. Once all state/university core requirements and the world language 2013 requirement are met, students may substitute a three-hour (or more) general elective in place of a core or world language area.

Fall Semester Year 1
3 ENGL 1013 English Composition I
3 MATH 1203 (depending on placement) or 1MATH 2033 (or higher-level math, recommended)
3 HIST 1113 Institutions and Ideas of World Civilizations I
3 1013 Elementary I world language course (depending on placement in sequence)
3 Non-HIST Social sciences state/university core course
3 HIST 1123 Institutions and Ideas of World Civilizations II
3 Fine Arts, Humanities state/university core course
3 2003 Intermediate I world language course (depending on placement and sequence)
4 Science state/university core lecture and corequisite lab
16 Semester Hours

Spring Semester Year 1
3 ENGL 1023 English Composition II
3 Fine Arts, Humanities state/university core course
3 2003 Intermediate I world language course (depending on placement and sequence)
4 Science state/university core lecture and corequisite lab
16 Semester Hours

Fall Semester Year 2
3 HIST 2003 History of the American People to 1877
3 Introduction to Area Studies Majors (AAST 1003, AMST 2003, CLST 1003, CLST 1013, EUST 2013, HUMN 2003, IREL/PLSC 2813, LAST 2013, MEST 2013)
3 2013 Intermediate II World Language Course (depending on placement and sequence)
3 Fine Arts, Humanities state/university core course (as needed)
4 Science state/university core lecture and corequisite lab
16 Semester Hours

Spring Semester Year 2
3 HIST 2013 History of the American People, 1877 to Present
3 †HIST 3000 or 4000 level (from Groups 1, 2, or 3 as needed*)
3 †Area Studies course 3000 or 4000-level (recommended) or †13000+ Fulbright elective
3 †Advanced Level Elective
4 General Elective
16 Semester Hours
### Fall Semester Year 3
- **6** †HIST 3000 or 4000 level (from Groups 1, 2, or 3 as needed*)
- **6** †Advanced Level Electives
- **3** †Area Studies course 3000 or 4000 level (recommended) or †‡HIST 3000+ Fulbright elective
- **1** General Electives
- **16** Semester Hours

### Spring Semester Year 3
- **3** †HIST 3000 or 4000 level (from Groups 1, 2, or 3 as needed*)
- **3** †HIST 4000 level (from Groups 1, 2, or 3 as needed*)
- **3** †Area Studies course 3000 or 4000 level (recommended) or †‡HIST 3000+ Fulbright elective
- **6** †Advanced Level Electives
- **15** Semester Hours

### Fall Semester Year 4
- **3** †HIST 4893 Senior Capstone Seminar or †‡HIST 4000 level (from Groups 1, 2, or 3 as needed*)
- **3** †HIST 4000 level (from Groups 1, 2, or 3 as needed*)
- **3** Area studies course 3000-4000 level (recommended) or general elective
- **6** †Advanced Level Electives (as needed) or General Electives
- **15** Semester Hours

### Spring Semester Year 4
- **3** †HIST 4000 level (from Groups 1, 2, or 3 as needed*) or HIST 4893 Senior Capstone Seminar (if not taken)
- **3** †HIST 4000 level (from Groups 1, 2, or 3 as needed*)
- **3** †Area Studies course 3000-4000 level (recommended) or General Elective
- **3** †Advanced Level Electives (as needed) or General Electives
- **15** Semester Hours

### Total Hours
- **124** Total Hours

---

**Requirements for a Minor in History:** 21 semester hours to include the following:

- **HIST 1113 or HIST 1123** (or HUMN 1114H or HUMN 1124H)
- **HIST 2003 or HIST 2013**

  15 hours of upper-level credit, at least 6 hours of which are at the 4000-level. A student must notify the department of his or her intent to minor.

  For the combined major in history and African and African American studies, see page 135.

  For freshman history, see HIST 1113 and 1123.

**History (B.A.) Social Studies Teacher Licensure Requirements:**

Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

Students who desire to teach social studies in middle school should consult with a middle-level adviser in the College of Education and Health Professions.

For requirements for advanced degrees in history, see the **Graduate School Catalog**.

For information regarding departmental scholarships, visit the Web at http://history.uark.edu/index.php/ugrd_scholarships.

See Page 367 for Humanities (HUMN) courses

---

### HUMANITIES (HUMN)

- **David Fredrick**
  - Chair of Studies
  - 425 Kimpel Hall
  - 479-575-6776

- **Hoyt H. Purvis**
  - Associate Chair of Studies
  - 416 Old Main
  - 479-575-5893
  - http://hr.uark.edu

The Humanities Program supports the Honors Humanities Project (H2P) as well as interdisciplinary coursework in Gender Studies, Medieval and Renaissance Studies, and Arts and Aesthetics. The Humanities Program also sponsors courses in Classics, Medieval, and Renaissance cultures taught every semester and every other summer (during even years) at the Rome Study Center.

---

### INTERNATIONAL RELATIONS (IREL)

- **Benjamin Grob-Fitzgibbon**
  - Chair of Studies
  - 416 Old Main
  - 479-575-5893
  - http://irel.uark.edu

The J. William Fulbright College of Arts and Sciences is strongly committed to the study of international relations and this program offers students a strong foundation for more advanced study as well as preparation for careers in an increasingly global economy and society. The degree offers a broad interdisciplinary course of study with a strong intercultural and international focus. Intensive language study and study abroad are especially encouraged.

**Requirements for a Major in International Relations:** In addition to the University/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met.

Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

A minimum of 45 credit hours to include:

- **3** – IREL/PLSC 2813 Intro to International Relations
- **3-6** – ECON 2143 Basic Economics or ECON 2013 Macroeconomics and ECON 2023 Microeconomics
- **3** – HIST 1123 World Civilization, 1500 – Present
- **3** – GEOG 2003 World Geography
- **3** – IREL 4003 International Relations Seminar
- **6** – Six credit hours of 3000-level or higher world language courses in the same language. (This requirement cannot be satisfied with 3 credits in one language and 3 credits in a second language.) Students may need to fulfill prerequisites in a world language at the 1003, 1013, 2003 or 2013 level, depending on placement level in that language.

**Area Studies Requirement:**

Select one (1) area studies focus, and complete the two required courses for that area (6 credit hours).
African and African American Studies
AAST 1003 Introduction to African and African American Studies
One 3000- or 4000-level AAST course specific to the countries, politics, cultures, people or geography of the continent of Africa, or as approved by the director of the international relations program.

Asian Studies
One course cross-listed with AIST or as approved by adviser
AIST 4003 Asian Studies Colloquium

European Studies
EUST 2013 Introduction to Europe
EUST 4003 European Studies Colloquium

Latin American and Latino Studies
LAST 2013 Latin American Studies
LAST 4003 Latin American Studies Colloquium

Middle East Studies
MEST 2013 Introduction to Middle East Studies
MEST 4003 Middle East Studies Colloquium

International Relations Tracks (15-18 credit hours):
Select one (1) of the following tracks, and within the desired track, select five (5) courses if taking ECON 2143/2013 or six (6) courses if taking ECON 2143.
No more than three (3) courses can be from any one department.
At least three (3) courses must be at the 3000- or 4000-level, at least one (1) of which must be at the 4000-level.
One course from the selected track must be applicable to the selected area studies focus. (See the specified area studies program in the catalog for a complete list of courses which are considered applicable to the area studies focus. Other courses may be approved with consent of the International Relations program chair or designee.)

Track One: Generalist
From the following International Security courses, select one:
HIST 3063 Military History
HIST 3453, Modern Terrorism
HIST 3473 Palestine and Israel in Modern Times
HIST 3533 World War II
HIST 3583 The United States and Vietnam
HIST 4363 Middle East since 1914
PLSC 4813 Politics of the Cold War
PLSC 4843 The Middle East in World Affairs

From the following International Economics courses, select one:
ECON 3843 Economic Development, Poverty, & the Role of the World Bank and IMF in Low-Income Countries
ECON 4633 International Trade Policy
ECON 4643 International Macroeconomics and Finance

From the following Political Science courses, select one:
PLSC 3503 Governments and Politics of East Asia
PLSC 3523 Politics of the Middle East
PLSC 3573 Governments and Politics of Latin America
PLSC 3803 International Organization
PLSC 3813 International Law
PLSC 3823 Theories of International Relations
PLSC 3853 American Foreign Policy
PLSC 4513 Creating Democracies
PLSC 4563 Government and Politics of Russia
PLSC 4593 Islam and Politics
PLSC 4803 Foreign Policy Analysis
PLSC 4813 Politics of the Cold War
PLSC 4823 Foreign Policy of East Asia
PLSC 4833 International Political Economy
PLSC 4843 The Middle East in World Affairs
PLSC 4853 International Norms and Corporate Social Responsibility
PLSC 4873 Inter-American Politics

From the following History courses, select one:
HIST 3043 History of the Modern Middle East
HIST 3213 Modern Latin America
HIST 3253 The History of Sub-Saharan Africa
HIST 3443 Modern Imperialism
HIST 3473 Palestine and Israel in Modern Times
HIST 3523 Modern China
HIST 3553 Russia Since 1861
HIST 3583 The United States and Vietnam
HIST 3683 Europe in the 19th Century
HIST 3693 Europe in the 20th Century
HIST 4123 Africa and the Trans-Atlantic Slave Trade
HIST 4153 Modern Ireland, 1798-1948
HIST 4183 Great Britain, 1707-1901
HIST 4193 Great Britain, 1901-2001
HIST 4213 The Era of the French Revolution
HIST 4223 France Since 1815
HIST 4243 Germany, 1789-1918
HIST 4253 Germany, 1918-1945
HIST 4263 Independence and Africa Today
HIST 4333 Modern Islamic Thought
HIST 4363 Middle East since 1914
HIST 4413 New Women in the Middle East
HIST 4433 Social and Cultural History of the Modern Middle East
HIST 4753 Diplomatic History of the United States, 1776-1900
HIST 4763 Diplomatic History of the United States, 1900-1945
HIST 4773 Diplomatic History of the United States, 1945 to Present
HIST 4783 History of Modern Mexico
HIST 4793 History of Colonial India, 1758-1948

Select one additional course from any of the above categories if taking ECON 2143. If taking ECON 2143, select two additional courses from any of the above categories.

Track Two: International Security
HIST 3043 History of the Modern Middle East
HIST 3063 Military History
HIST 3443 Modern Imperialism
HIST 3453 Modern Terrorism
HIST 3473 Palestine and Israel in Modern Times
HIST 3533 World War II
HIST 3583 The United States and Vietnam
HIST 4183 Great Britain, 1707-1901
HIST 4193 Great Britain, 1901-2001
HIST 4243 Germany, 1789-1918
HIST 4253 Germany, 1918-1945
HIST 4363 Middle East since 1914
HIST 4433 Social and Cultural History of the Modern Middle East
HIST 4753 Diplomatic History of the United States, 1776-1900
HIST 4763 Diplomatic History of the United States, 1900-1945
HIST 4773 Diplomatic History of the United States, 1945 to Present
HIST 4783 History of Modern Mexico
HIST 4793 History of Colonial India, 1758-1948

Track Three: International Economics and Development
Note: At least two of the chosen courses in this track must be from ECON
ECON 3843 Economic Development, Poverty, & the Role of the World Bank and IMF in Low-Income Countries
ECON 3853 Emerging Markets
ECON 3933 The Japanese Economic System
ECON 4633 International Trade Policy
ECON 4643 International Macroeconomics and Finance
GEOG 3353 Economic Geography of NAFTA
HIST 3443 Modern Imperialism
HIST 3473 Palestine and Israel in Modern Times
HIST 4123 Africa and the Trans-Atlantic Slave Trade
HIST 4183 Great Britain, 1707-1901
HIST 4193 Great Britain, 1901-2001
HIST 4263 Independence and Africa Today
PLSC 3803 International Organization
PLSC 3813 International Law
PLSC 3823 Theories of International Relations
PLSC 3853 American Foreign Policy
PLSC 4513 Creating Democracies
PLSC 4803 Foreign Policy Analysis
PLSC 4813 Politics of the Cold War
PLSC 4833 International Political Economy
PLSC 4843 The Middle East in World Affairs
PLSC 4853 International Norms and Corporate Social Responsibility
PLSC 4873 Inter-American Politics

Track Four: Food, the Environment, and Geography in International Relations

AFLS 2003 Introduction to Global Agricultural, Food and Life Sciences
GEOG 3353 Economic Geography of NAFTA
GEOG 4033 Geography of the Middle East
GEOG 4243 Political Geography
GEOG 4783 Geography of Europe
PLSC 3803 International Organization
PLSC 3813 International Law
PLSC 3823 Theories of International Relations
PLSC 4833 International Political Economy
PLSC 4853 International Norms and Corporate Social Responsibility
PLSC 4873 Inter-American Politics

Track Five: Peoples, Cultures, and Identities in Global Context

ANTH 2013/LAST 2013 Introduction to Latin American Studies
ANTH 3503 Power and Popular Protest in Latin America
ANTH 3523 Gender and Politics in Latin America
ANTH 4063 Women in Africa
ANTH 4533 Middle East Cultures
ANTH 4583 Peoples and Cultures of Sub-Saharan Africa
ENGL 2323 Survey of Modern British, Irish, and Postcolonial Literature
ENGL 3763 Topics in Postcolonial Literature and Culture
EUST 2013 Introduction to Europe
GEOG 1123 Human Geography
HIST 3033 Islamic Civilization
HIST 3043 History of the Modern Middle East
HIST 3213 Modern Latin America
HIST 3253 The History of Sub-Saharan Africa
HIST 3443 Modern Imperialism
HIST 3473 Palestine and Israel in Modern Times
HIST 3523 Modern China
HIST 3553 Russia Since 1861
HIST 3603 Europe in the 19th Century
HIST 3693 Europe in the 20th Century
HIST 4123 Africa and the Trans-Atlantic Slave Trade
HIST 4153 Modern Ireland, 1798-1948
HIST 4183 Great Britain, 1707-1901
HIST 4193 Great Britain, 1901-2001
HIST 4213 The Era of the French Revolution
HIST 4223 France Since 1815
HIST 4243 Germany, 1789-1918
HIST 4253 Germany, 1918-1945
HIST 4263 Independence and Africa Today
HIST 4333 Modern Islamic Thought
HIST 4363 Middle East since 1914
HIST 4413 New Women in the Middle East
HIST 4433 Social and Cultural History of the Modern Middle East
HIST 4783 History of Modern Mexico
HIST 4793 Colonial India, 1758-1948
MEST 2003 Islam in History, Practice and Experience
MEST 2013 Introduction to Middle East Studies
PLSC 3503 Governments and Politics of East Asia
PLSC 3523 Politics of the Middle East
PLSC 3573 Governments and Politics of Latin America
PLSC 4563 Government and Politics of Russia
PLSC 4593 Islam and Politics
PLSC 4823 Foreign Policy of East Asia
PLSC 4843 The Middle East in World Affairs
PLSC 4853 International Norms and Corporate Responsibility
PLSC 4873 Inter-American Politics

Track Six: The United States in the World

HIST 2003 History of the American People to 1877
HIST 2013 History of the American People, 1877 to Present
HIST 3443 Modern Imperialism
HIST 3553 World War II
HIST 3583 The United States and Vietnam
HIST 4753 Diplomatic History of the United States, 1776-1900
HIST 4763 Diplomatic History of the United States, 1900-1945
HIST 4773 Diplomatic History of the United States, 1945 to Present
PLSC 3803 International Organization
PLSC 3813 International Law
PLSC 3823 Theories of International Relations
PLSC 3853 American Foreign Policy
PLSC 4513 Creating Democracies
PLSC 4803 Foreign Policy Analysis
PLSC 4813 Politics of the Cold War
PLSC 4833 International Political Economy
PLSC 4853 International Norms and Corporate Responsibility
PLSC 4873 Inter-American Politics

Study Abroad: All International Relations majors are strongly encouraged to study abroad. With prior approval from the International Relations chair or designee, up to six credits of related and appropriate study abroad coursework can be used to fulfill part of the thematic track requirement. Advanced (3000-level equivalent) study abroad coursework in languages may also be used to fulfill the language requirement.

Internships: All International Relations majors are strongly encouraged to seek out an IR-related internship. With prior approval from the International Relations chair or designee, up to six credits of internship credits (IREL 400V) from a related and appropriate internship can be used to fulfill part of the thematic track requirement.

Independent Study: With prior approval from the International Relations chair or designee, up to six credits of independent study (IREL 406V) can be used to fulfill part of the thematic track requirement.

Honors: Honors students may take up to 12 credit hours of International Relations Honors Thesis (IREL 399V) as part of the thematic track requirement. All International Relations majors are strongly encouraged to seek out an IR-related internship. With prior approval from the International Relations chair or designee, up to six credits of internship credits (IREL 400V) from a related and appropriate internship can be used to fulfill part of the thematic track requirement.

International Relations B.A.

Eight-Semester Degree Program

Fall Semester Year 1
3 ENGL 1013 Composition I
3-4 MATH 1203
3 PLSC 2003 American National Government
3 1013 Elementary II world language course (depending on placement in sequence)
JOURNALISM (JOUR),
THE WALTER J. LEMKE DEPARTMENT OF

Dale Carpenter
Chair of the Department
116 Kimpel Hall
479-575-3601
http://uark.edu/journalism

FACULTY
• Professors Carpenter, Foley, Purvis, Wicks
• Professors Emeriti Ingenthron, Reed
• Associate Professors Coustaut, Fosu, Jordan, Miller, Stockdell, Watkins
• Associate Professor Emerita Montgomery
• Assistant Professors Kirkpatrick, Schulte
• Instructors Ledbetter, Martin, Shurlds, Tuychiev
• Instructor Emerita Belzung

The purpose of the Walter J. Lemke Department of Journalism is to provide students with knowledge of the history, theory, and ethics of mass communications, to educate students in journalistic skills, including the ability to express themselves logically and clearly, and to guide them in securing specialized knowledge of society appropriate to journalistic careers.

Requirements for a B.A. degree in Journalism: All university students must fulfill the minimum University/state core requirements (see page 41). A minimum of 84-85 hours in non-journalism courses must be applied toward the 124 hours required by the college for a Bachelor of Arts degree.

Bolded courses from the list below may be counted toward some part of the University/state minimum core requirements, as applicable.

3 – MATH 2033 Mathematical Thought. MATH 2043 Survey of Calculus, MATH 2053 Finite Mathematics, or MATH 2183 Mathematical Reasoning, or higher level math

3-6 – Intermediate I (course number 2003) of a world language. The number of credit hours taken to complete this level of proficiency depends on placement level in the language course sequence. Elementary Language courses numbered 1003 generally do not count toward the 124 minimum credit hours required for graduation. Consult page 129 under college admission requirements for details.

3 – WLIT 1113 World Literature I, or WLIT 1123 World Literature II, or an advanced literature course, or a language literature course

3 – PHIL 2003 Intro to Philosophy or PHIL 2103 Intro to Ethics or any philosophy course at the 3000-level or higher (recommended: PHIL 3103 Ethics and the Professions)

6 – PLSC 2003 American National Government and a second PLSC course (recommended courses include: PLSC 2813 Intro to International Relations, PLSC 3233 The American Congress, and PLSC 4233 The American Chief Executive)

3-6 – ECON 2143 Basic Economics: Theory and Practice. A combination of ECON 2013 Principles of Macroeconomics and ECON 2023 Principles of Microeconomics will be allowed in place of ECON 2143

3 – MATH 2043 Survey of Calculus

3 – COMM 1313 Public Speaking

3 – 3000-4000 level HIST course

3 – 3000-4000 level Elective

3 – Cultural/Diversity Requirement: 3 hours of cultural/diversity studies to be selected from the following or as approved by the Lemke Department of Journalism:
• ANTH 4533 Middle East Cultures
• COMM 4343 Intercultural Communication
• HIST 3233 African American History to 1877
• HIST 3243 African American History Since 1877
• HIST 3263 History of the American Indian
• JOUR 405V Special Journalism Seminar—cultural/diversity-related topics as approved by the department
• SCWK 3193 Human Diversity and Social Work

The YOU of A
A minimum of 33 semester hours in journalism, including JOUR 1023, JOUR 1033, and JOUR 3633. A minimum grade of “C” is required in all journalism courses that serve as prerequisites for advanced journalism courses. In certain courses a minimum grade of “B” is required. Journalism majors must also fulfill the requirements for either the news/editorial option, the advertising/public relations option, or the broadcast option. Students must select a sequence when they enter the department. Specific non-journalism courses in addition to the journalism courses are required for the advertising/public relations sequence. The requirements for each sequence are as follows:

**News/Editorial:** JOUR 2013, JOUR 3013, JOUR 3123, and either JOUR 3023 or JOUR 4553 are required, plus any four additional journalism courses. It is recommended that one course choice be an internship.

**Broadcast:** JOUR 2032/2031L, JOUR 3072/3071L, JOUR 4863, and JOUR 4873 are required, plus any four additional journalism courses. It is recommended that one course choice be an internship and another choice be JOUR 4883.

**Advertising/Public Relations:** JOUR 3723, JOUR 3743, JOUR 4143, JOUR 4423, and JOUR 4453 are required, plus any three additional journalism courses. It is recommended that one course choice be an internship. Also required are MKTG 3433 and MKTG 3553. Students seeking admission to the Ad/PR Sequence must have an overall GPA of 2.5 or higher: 1) to be admitted to the Ad/PR Sequence, and 2) to enroll in JOUR 3723 and JOUR 3743. Ad/PR Sequence students are required to earn a grade of “B” or higher in both JOUR 3723 and JOUR 3743 to qualify to take all upper level Ad/PR sequence courses. Students may retake JOUR 3723 and JOUR 3743 once only to earn a grade of “B” or higher.

**Writing Requirement:** Students should consult with their faculty advisors for information on how to fulfill the college writing requirement.

---

**Journalism B.A., Advertising and Public Relations Sequence**

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all university/state core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

**Fall Semester Year 1**

3 ENGL 1013 English Composition I
3-4 MATH 1203 (If required) or MATH 2033, 2043, 2053, 2183 or 2554
3 JOUR 1023 Media and Society or JOUR 1033 Fundamentals of Journalism or social science state/university core requirement
3 PLSC 2003 American National Government
3 1013 Elementary II world language course

**Spring Semester Year 1**

3 ENGL 1013 English Composition II
3-4 MATH 2033, 2043, 2053, 2183 or 2554 (if needed) or General Elective
3 JOUR 1033 Fundamentals of Journalism or social science state/university core requirement or JOUR 1023 Media and Society as needed
4 2003 Intermediate I world language course
3 ECON 2143 Basic Economics or fine arts university/state core requirement

**Fall Semester Year 2**

3 Fine arts university/state core requirement or ECON 2143 Basic Econ. as needed
3 Social science state/university core requirement or JOUR 1023 Media and Society or JOUR 1033 Fundamentals of Journalism as needed
4 Science university/state core lecture with corequisite lab requirement
3 PHIL 2003 or PHIL 2103 or PHIL 3103
3 †Advanced Level Elective

**Spring Semester Year 2**

3 †Advanced Level Elective
3 †MKTG 3433 Introduction to Marketing Strategy
3 Social science state/university core requirement

---

**Journalism B.A., Broadcast Sequence**

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

**Fall Semester Year 1**

3 ENGL 1013 English Composition I
3-4 MATH 1203 (If required) or MATH 2033, 2043, 2053, 2183 or 2554
3 JOUR 1023 Media and Society
3 JOUR 1033 Fundamentals of Journalism or social science state/university core requirement
4 Science university/state core lecture and corequisite lab requirement
3 PLSC 2003 American National Government or fine arts state/university core requirement (as needed)

**Spring Semester Year 1**

3 ENGL 1013 English Composition II
3-4 MATH 2033, 2043, 2053, 2183 or 2544
3 JOUR 1033 Fundamentals of Journalism
4 Science university/state core lecture and corequisite lab requirement
3 PLSC 2003 American National Government or fine arts state/university core requirement

**Fall Semester Year 2**

3 Non-JOUR General Elective
3 Social science state/university core requirement
3 WLT 1113 or WLT 1123
3 †Non-JOUR Advanced Level Elective

---
Journalism B.A., News/Editorial Sequence

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

3 ENGL 1013 English Composition I
3-4 MATH 1203 (If required) or MATH 2033, 2043, 2053, 2183 or 2554
3 JOUR 1023 Media and Society
3 Fine arts state/university core requirement or PLSC 2003 American National Government
3 Social science state/university core requirement
15-16 Semester Hours

Spring Semester Year 1

3 ENGL 1023 English Composition II
3 MATH 2043, 2053, 2183 or 2554 (If needed) or General Elective
3 JOUR 1033 Fundamentals of Journalism
3 Science university/state core lecture and corequisite lab
3 PLSC 2003 American National Government or fine arts state/university core requirement
16 Semester Hours

Fall Semester Year 2

3 †JOUR 3072/3071L Broadcast News Reporting I with Lab
3 †JOUR 3633 Media Law
3 PLSC course or ECON 2143 Basic Economics
7 Non-JOUR general electives
16 Semester Hours

Spring Semester Year 2

3 †JOUR 4863 Television News Reporting I with Lab
3 †JOUR upper level elective
3 †Non-JOUR Advanced Elective
3 ECON 2143 Basic Economics (If needed) or PLSC course
4 Science university/state core lecture and corequisite lab
16 Semester Hours

Fall Semester Year 3

3 †JOUR 4873 Television News Reporting II with Lab
3 †JOUR upper level elective
3 †JOUR upper level elective
3 Non-JOUR Cultural/diversity studies course or 3000-4000 ‡‡HIST course
3 †Non-JOUR Advanced Level Elective
15 Semester Hours

Spring Semester Year 3

3 †JOUR upper level elective
1 †JOUR 4981 Journalism Writing Requirement
3 3000-4000 ‡‡HIST course or non-JOUR cultural/diversity studies course
3 †Advanced Level Elective
6 †Non-JOUR General Elective
16 Semester Hours

124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fullbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Requirements for Departmental Honors in Journalism: The Journalism Honors Program gives upper-division undergraduates a chance to pursue journalistic research in the context of other academic disciplines. Honors candidates carry out independent study and research under the guidance of the journalism faculty and participate in honors classes in journalism and at least one other discipline. Outstanding student achievement will be recognized by the award of distinction “Journalism Scholar Cum Laude” at graduation. Higher degree distinctions are recommended only in cases of exceptional achievement and are based on the candidate's total honors studies program. To be considered for such distinctions, students must earn a minimum cumulative 3.50 grade-point average in journalism.

Journalism Departmental Honors students must satisfy the general Fulbright College honors requirements as stated elsewhere in this catalog. In addition, for journalism departmental honors, they must complete a minimum of 12 hours in honors credits, with thesis credit determined by departmental rules. These requirements are specified as follows:

Journalism Four-Year and Departmental Honors students must:
1. enter the program no later than the first semester of their junior year, and register for thesis beginning with the first semester of the junior year,
2. complete at least one journalism honors colloquium,
3. complete the journalism honors core research course JOUR 5043,
4. complete an approved honors colloquium in a second discipline,
5. complete and orally defend an honors thesis based on honors courses of study, and
6. earn a cumulative 3.50 grade-point average in journalism courses.

Four-Year Honors students who would like to major in journalism must meet all requirements for Journalism Department Honors.

More specific information on the Journalism Departmental Honors program, including the requirements for Four-Year Honors students, is available from the Journalism Department Honors adviser.

Combined Majors

Combined Major in Journalism and Political Science: The combined major in journalism and political science has been developed for students who wish to combine their strong interests in both journalism and political science. There are two journalism options available: Public Affairs Reporting and Political Advertising and Promotion.

Requirements for the Combined Major in Journalism and Political Science: All university students must fulfill the minimum University/state core requirements (see page 41). A minimum of 84–85 hours in non-journalism courses must be applied toward the 124 hours required by the college for a Bachelor of Arts degree. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

3 – MATH 2033 Mathematical Thought, MATH 2043 Survey of Calculus, MATH 2053 Finite Mathematics, or MATH 2183 Mathematical Reasoning, or higher level math
3–6 – Intermediate I (course number 2003) of a world language. The number of credit hours taken to complete this level of proficiency depends on placement level in the language course sequence. Elementary Language courses numbered 1003 generally do not count toward the 124 minimum credit hours required for graduation. Consult page 129 under college admission requirements for details.
3 – WLIT 1113 World Literature I, or WLIT 1123 World Literature II, or an advanced language course, or a language literature course;
3 – PHIL 2003 Intro to Philosophy or PHIL 2103 Intro to Ethics or any philosophy course at the 3000-level or higher (recommended: PHIL 3103 Ethics and the Professions);
6 – PLSC 2003 American National Government and a second PLSC course (recommended courses include: PLSC 2813 Intro to International Relations, PLSC 3253 The American Congress, and PLSC 4233 The American Chief Executive);
3–6 – ECON 2143 Basic Economics: Theory and Practice. A combination of ECON 2013 Principles of Macroeconomics and ECON 2023 Principles of Microeconomics will be allowed in place of ECON 2143;
3 – COMM 1313 Public Speaking;
3 – 3000-4000 level HIST course;
3 – Cultural/Diversity Requirement: 3 hours of cultural/diversity studies to be selected from the following or as approved by the Lemke Department of Journalism: ANTH 4533 Middle East Cultures COMM 4343 Intercultural Communication HIST 3233 African American History to 1877 HIST 3243 African American History Since 1877 HIST 3263 History of the American Indian JOUR 405V Special Journalism Seminar — cultural/diversity-related topics as approved by the department SCWK 3193 Human Diversity and Social Work SOCI 3193 Race, Class and Gender in America (SOCI 2013 prerequisite) Other cultural/diversity-related topics as approved by the Department of Journalism

Those wishing to emphasize Public Affairs Reporting can choose from either print or broadcast news:

Print News: JOUR 2013, JOUR 3013, JOUR 3023, JOUR 4043, and one additional journalism course.

Broadcast News: JOUR 2032/2031L, JOUR 3072/3071L, JOUR 4043, JOUR 4863, and JOUR 4873.

Those wishing to emphasize Political Advertising and Promotion take the following courses: JOUR 3723, JOUR 3743, JOUR 4043, and 6 hours of advanced journalism courses. Students should check course prerequisites.

The political science requirement may be satisfied by 24 semester hours of courses, including PLSC 2003, PLSC 2013, PLSC 4373, and either an additional 15 hours of advanced political science courses selected entirely from American political affairs courses:

PLSC 3103  PLSC 3153  PLSC 3183  PLSC 3223
PLSC 3233  PLSC 3243  PLSC 3253  PLSC 3603
PLSC 3853  PLSC 3923H  PLSC 3913  PLSC 3933
PLSC 394V  PLSC 3983  PLSC 399VH  PLSC 4193
PLSC 4203  PLSC 4213  PLSC 4243  PLSC 4253
PLSC 4813  PLSC 4823

Or an additional 15 hours of advanced political science courses elected entirely from foreign affairs courses:

PLSC 3503  PLSC 3523  PLSC 3573  PLSC 3603
PLSC 3803  PLSC 3813  PLSC 3823  PLSC 3853
PLSC 3923H  PLSC 394V  PLSC 399VH  PLSC 4513
PLSC 4563  PLSC 4573  PLSC 4593  PLSC 4803
PLSC 4843  PLSC 4873

Writing Requirement: Students pursuing the journalism/political science combined major may satisfy the college writing requirement through either the Department of Journalism or through the Department of Political Science.

In Journalism: Students should consult with their Journalism faculty advisers for information on how to fulfill the college writing requirement.

In Political Science: The college writing requirement is fulfilled by submitting an acceptable research/analytical paper to the department for approval at least four weeks prior to graduation. The paper may be derived from completion of an honors essay (PLSC 499VH), a senior thesis (PLSC 498V), or some other advanced course in political science. The student is urged to consult with his or her faculty adviser no later than early in the first semester of the senior year.

Journalism/Political Science B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1
3  ENGL 1013 Composition I
3–4  MATH 1203 (if required) or †MATH 2033, 2043, 2053, 2183 or 2554
3  JOUR 1023 Media and Society or JOUR 1033 Fundamentals of Journalism
3  Social science university/state core requirement (HIST recommended)
3  1013 Elementary II world language

15–16 Total Hours

Spring Semester Year 1
3  ENGL 1023 Composition II
3–4  †MATH 2033, 2043, 2053, 2183 or 2554 (if still needed) or non-JOUR General Elective
3  PLSC 2003 American National Government
3  JOUR 1023 Media and Society or JOUR 1033 Fundamentals of Journalism (as needed)
3  2003 Intermediate I world language

15–16 Total Hours

Fall Semester Year 2
3  PLSC 2013 Introduction to Comparative Politics (meets a requirement for core area e)
3  †JOUR course from selected concentration
4  Science university/state core lecture w/corequisite lab requirement
Requirements for a Combined Major in English and Journalism: All university students must fulfill the minimum University/state core requirements (see page 41). A minimum of 84-85 hours in non-journalism courses must be applied toward the 124 hours required by the college for a Bachelor of Arts degree. Bolded courses from the list below may be counted toward some part of the University/state core requirements, as applicable.

3 – MATH 2033 Mathematical Thought, MATH 2043 Survey of Calculus, MATH 2053 Finite Mathematics, or MATH 2183 Mathematical Reasoning, or higher level math.

3-6 – Intermediate I (course number 2003) of a world language. The number of credit hours taken to complete this level of proficiency depends on placement level in the language course sequence. Elementary Language Courses numbered 1003 generally do not count toward the 124 minimum credit hours required for graduation. Consult page 129 under college admission requirements for details.

3 – WLIT 1113 World Literature I, or WLIT 1123 World Literature II, or an advanced literature course, or a language literature course.

3 – PHIL 2003 Intro to Philosophy or PHIL 2103 Intro to Ethics or any philosophy course at the 3000-level or higher (recommended: PHIL 3103 Ethics and the Professions).

6 – PLSC 2003 American National Government and a second PLSC course (recommended courses include: PLSC 2813 Intro to International Relations, PLSC 3233 The American Congress, and PLSC 4233 The American Chief Executive).

3–6 – ECON 2143 Basic Economics: Theory and Practice. A combination of ECON 2013 Principles of Macroeconomics and ECON 2023 Principles of Microeconomics will be allowed in place of ECON 2143;

3 – COMM 1313 Public Speaking;

3 – 3000-4000 level HIST course;

3 – Cultural/Diversity Requirement: 3 hours of cultural/diversity studies to be selected from the following or as approved by the Lemke Department of Journalism:

- ANTH 4533 Middle East Cultures
- COMM 4343 Intercultural Communication
- HIST 3233 African American History to 1877
- HIST 3243 African American History Since 1877
- HIST 3263 History of the American Indian
- JOUR 405V Special Journalism Seminar—cultural/diversity-related topics as approved by the department
- SCWK 3193 Human Diversity and Social Work
- SOCI 3193 Race, Class and Gender in America (SOCI 2013 prerequisite)

Other cultural/diversity-related topics as approved by the Department of Journalism.

The journalism requirement may be satisfied by 24 semester hours of courses, including JOUR 1023, JOUR 1033, and JOUR 3633. The remaining hours are filled from the following options.

Those wishing to emphasize Public Affairs Reporting can choose from either print or broadcast news:

Print News: JOUR 2013, JOUR 3013, JOUR 3023, JOUR 4043, and one additional journalism course.

Broadcast News: JOUR 2032/2031L, JOUR 3072/3071L, JOUR 4863, and JOUR 4873, and one additional journalism course.

The English requirements for this combined major are as follows: 24 hours of English courses (not counting ENGL 0003, ENGL 1013, ENGL 1023, and ENGL 2003) to include any nine hours of survey courses (chosen from ENGL 2003, ENGL 2313, ENGL 2323, ENGL 2343, and ENGL 2533), and 15 additional hours chosen from English courses numbered above 3000 and WLIT courses above 2333.

In addition, students are strongly recommended to complete up through the 2013 Intermediate II level of a world language.

Writing Requirement: All upper division English courses require a research or an analytical paper except ENGL 4003 and the courses in creative writing (ENGL 3013, ENGL 4013, ENGL 4023, ENGL 4073). For this reason, all students who fulfill the requirements for the combined major in Journalism and English thereby fulfill the Fulbright College writing requirement.

Assessment Requirement: Every senior English major must take the program assessment exam administered by the department each spring semester to graduate. Exam results will not affect GPA, although the student’s score will be noted on his or her permanent academic record. This requirement may be waived in extraordinary circumstances by the department’s Director of Undergraduate Studies. Contact your adviser for more information.

Combined Major in English and Journalism

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

3 ENGL 1013 Composition I

3-4 MATH 2023 (If required) or MATH 2023, 2033, 2053, 2183, or 2554

3 JOUR 1023 Media and Society or JOUR 1033 Fundamentals of Journalism

3 Fine Arts university/state core requirement or PLSC 2003 American National Government
<table>
<thead>
<tr>
<th>Supporting Areas:</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish Language</td>
<td>4</td>
</tr>
<tr>
<td>Portuguese Language</td>
<td>4</td>
</tr>
</tbody>
</table>

**Journalism (B.A.) Teacher Licensure Requirements:**

Students interested in obtaining teacher licensure may not obtain licensure in journalism alone. Licensure in another discipline must be obtained, and journalism may be added as an additional area of licensure. Please refer to the Secondary Education Requirements for Fulbright College Students on page 125 or contact your departmental adviser or an adviser in the College of Education and Health Professions.

**Journalism for Agricultural Majors:** A list of 18 hours of journalism courses is available for students in the College of Agricultural, Food and Life Sciences. See the Bumpers College section of this catalog for these journalism courses. This program is recommended for students who plan to work in public relations in these areas. It is also recommended for students who expect to enter extension work in agriculture and home economics and who will use the mass media to promote their programs.

---

**LATIN AMERICAN AND LATINO STUDIES (LAST)**

Steven M. Bell  
Chair of Studies  
605 Kimpel Hall  
479-575-2951  
http://last.uark.edu/

**FACULTY**

- Professors Britton (economics), Graff (geography), Hehr (geography), Horowitz (economics), Purvis (journalism and political science), Restrepo (world languages), Sloan (music)  
- Associate Professors Bell (world languages), Erickson (anthropology), Kali (economics), Méndez (economics), Reyes (economics), Ruiz (world languages), Ryan (political science), Sloan (history), Villalobos (world languages)  
- Assistant Professors Bridges (psychology), Corrigan (communications), Jimeno (political science), Puente (world languages)

Students interested in Latin America and wishing to maximize their potential for academic, business, professional, or government careers related to the area, may earn a combined major or a minor in Latin American and Latino studies together with a major in another discipline in Fulbright College. Advice on appropriate combinations of Latin American and Latino studies with other majors as well as individual approval of such combinations may be obtained from the LAST program director.

New students in this program must officially declare the combined major and notify the LAST program director. Degree checks must also be cleared with the program director. Freshmen and sophomores considering this program are advised to begin their study of Spanish or Portuguese as early as possible.

**Requirements for a Combined Major in Latin American and Latino Studies:**

In addition to the requirements of a primary departmental major, students pursuing a combined major in Latin American and Latino Studies must complete the following:

**Language Competence:** The student must complete SPAN 2013 (or equivalent).

Provisions are available for recognition of language skills gained by other means than formal course work taken at the University of Arkansas. See information under the entry in the department of world languages. Further functional work in Spanish or Portuguese as well as study and residence in a Latin American nation can serve to strengthen language competence and are encouraged.

**Colloquium:** The student must complete at least three hours in the interdepartmental colloquium, LAST 4003. The Colloquium may be repeated, with the adviser’s approval, provided the topic is different.

**Electives:** The student must complete 18 hours, in addition to the LAST Colloquium, in courses with specific Latin American or Latino content, or individualized study options under instructors teaching Latin American or Latino studies. Students choosing to take individualized readings or directed research courses must obtain the approval of the director of the area studies program. In the selection of the electives, the following conditions apply:

---

**Journalism (B.A.) Teacher Licensure Requirements:**

Students interested in obtaining teacher licensure may not obtain licensure in journalism alone. Licensure in another discipline must be obtained, and journalism may be added as an additional area of licensure. Please refer to the Secondary Education Requirements for Fulbright College Students on page 125 or contact your departmental adviser or an adviser in the College of Education and Health Professions.
1. Courses must be selected from at least three different departments,
2. A maximum of nine hours may be submitted from courses taken in any one department.

The following courses and individualized study options may be taken in fulfillment of elective requirements (for detailed descriptions please see the listings under the individual departmental headings):

**Anthropology**
- ANTH 2013 Intro to Latin American Studies
- ANTH 3213 Indians of North America
- ANTH 3503 Power and Popular Protest in Latin America
- ANTH 3523 Gender and Politics in Latin America
- ANTH 4263 Identity and Culture in the U.S.-Mexico Borderlands

**Economics**
- ECON 3843 Economic Development & the World Bank
- ECON 3853 Emerging Markets

**Geography**
- GEOG 2003 World Regional Geography

**History**
- HIST 3203 Colonial Latin America
- HIST 3213 Modern Latin America
- HIST 4783 History of Modern Mexico
- HIST 5313 Reading Seminar in Latin American History
- HIST 5323 Research Seminar in Latin American History

**Latin American Studies**
- LAST 2013 Intro. to Latin American Studies
- LAST 399VH Honors Thesis
- LAST 4003 Latin American Studies Colloquium

**Music**
- MUHS 4253 Special Topics in Music History: Latin American Music

**Political Science**
- PLSC 3263 Latino Politics
- PLSC 3573 Governments and Politics of Latin America
- PLSC 4873 Inter-American Politics

**Social Work**
- SCWK 3193 Human Diversity and Social Work

**Spanish**
- SPAN 3103 Cultural Readings
- SPAN 3113 Intro. to Literature
- SPAN 3123 Spanish for Heritage Speakers
- SPAN 4133 Survey of Spanish-American Literature I
- SPAN 4193 Survey of Spanish-American Literature II
- SPAN 4223 Latin American Civilization
- SPAN 4243 Literature and Culture in the Hispanic United States
- SPAN 4253 Latin American Cinema and Society
- SPAN 4553 Latin America Today
- SPAN 475V Special Investigations
- SPAN 4883 Indigenous Literatures of Mesoamerica, the Andes, and the Amazon
- SPAN 5253 Colonial Literature and Culture
- SPAN 5393 19th Century Spanish-American Literature
- SPAN 5403 Spanish American Theater
- SPAN 5463 20th Century Spanish-American Literature
- SPAN 5883 Indigenous Literatures

Requirements for a Minor in Latin American and Latino Studies: Students wishing to minor in Latin American and Latino studies must fulfill the Colloquium (LAST 4003) and the language requirements described above, and must complete at least 12 hours from among the electives listed above. Electives must include courses from at least two different academic departments. Included in the 12 hours may be 3 additional hours of LAST 4003, provided the topic is different.

Requirements for Honors in Latin American and Latino Studies: The Honors Program in Latin American and Latino studies gives junior and senior students of high ability the opportunity to enroll in enriched courses and conduct independent research culminating in an honors thesis. In addition to satisfying the general Fulbright College requirements for graduation and the basic eligibility requirements for honors as established by the Honors Council, candidates for honors in Latin American and Latino studies must complete 12 hours of honors credit in partial satisfaction of requirements for the co-major. One to six of these may be thesis hours (LAST 399VH). The preferred method for satisfying the remaining hours is to enroll in the colloquium at least once for honors credit (LAST 4003H) and to take relevant honors colloquia or graduate courses (with permission) in one of the departments contributing to this interdisciplinary area study. The thesis committee shall include a representative from the major discipline (in the case of multiple majors, from the discipline contributing most significantly to the topic). Successful completion of these requirements will be recognized by the award of the distinction “Latin American and Latino Studies Scholar Cum Laude” at graduation. Higher degree distinctions are recommended only in exceptional cases and are based upon the whole of the candidate's program of honors studies.

---

**MATHEMATICAL SCIENCES (MASC)**

Chaim Goodman-Strauss  
Chair of the Department  
301 Science and Engineering  
479-575-3351  
http://math.uark.edu

**FACULTY**
- Distinguished Professor Schein
- Professors Akeroyd, Brewer, Capogna, Cochran, Feldman, Goodman-Strauss, Lanzani, Luecking, Madison, Rieck, Ryan
- Professors Emeriti Duncan, Dun, Kimura, Long, Scroggs, Summers
- Associate Professors Arnold, Harrington, Johnson, Meaux, Meek, Petris, Song
- Associate Professor Emeritus Monroe
- Assistant Professors Day, Dingman, Han, Raich, Tjani
- Clinical Associate Professor Korth
- Clinical Assistant Professors Harris, Woodland
- Visiting Assistant Professor Rutherford
- Instructors Cleaveland, Crisel, Fincher, Gastineau, Keiffer, Kennedy, Li, Morris, Nitschke, Nobles, Rosell, Sullivan, Zhang (C.), Zhang (L.)
- Instructor Emeriti Lieber, Mackey, Wickliff, Ziegler

The Department of Mathematical Sciences is committed to high level mathematics instruction, preparing students for careers in secondary education, actuarial science and industry, and for entrance into graduate studies in mathematics and statistics. The Bachelor of Arts degree is often sought by future secondary education majors or by students wishing a broader exposure to the humanities. The Bachelor of Science degree is sought by students who intend to go on to graduate studies or who would like a deeper and broader understanding of higher mathematics. Enrollment in or completion of any course at the level of MATH 2554 or higher is required to enter into the mathematics program.

**Requirements for a Major in Mathematics, B.A. Degree:** Students must complete 12 credit degree hours to include the minimum University/state core requirements (see page 41), the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under Fulbright College Academic Regulations and Degree Completion Program Policy), and the following liberal arts and major course requirements. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

- A minimum of 63 hours:
  - 12 – Twelve total hours from the following science courses, at least 4 hours from each of the following two areas:
    - Biological Sciences – ANTH 1013/1011L, BIOL 1543/1541L, BIOL...
Students must complete 124 degree credit hours to include the minimum University/state core requirements (see page 41), the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under Fulbright College Academic Regulations and Degree Completion Program Policy), and the following liberal arts and major course requirements. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

15-20 – Two of the following sequences of science courses and one advanced-level course from BIOL, CHEM, CSCE, GEOL or PHYS: BIOL 1543/1541L and one of BIOL 1603/1601L, BIOL 1613/1611L, BIOL 2013/2011L or BIOL 2533/2531L CHEM 1103/1101L and CHEM 1123/1121L CSES 2014 GEOL 1113/1111L and GEOL 1133/1131L PHYS 2054 and PHYS 2074

3 – Philosophy course to be selected from: PHIL 2003, PHIL 2103, or PHIL 3103

3 – One additional non-PHIL University/state core humanities course

3 – Any world language at the Elementary II 1013 level. NOTE: If 1003 is taken as a prerequisite for 1013, 1003 usually will not count towards the 124 hours required for college degree credit; see Fulbright College Admission Requirements on page 129 for further details.

As a part of the requirements for a B.S. degree with a major in mathematics, the student must also complete the following 28 hours: MATH 2574, MATH 2584, MATH 2701, MATH 2803, MATH 3093, MATH 3113, MATH 3513, and MATH 4933 and 12 semester hours of courses in mathematics selected from MATH 2584 or MATH and STAT courses numbered at the 3000-level or higher; and the completion of a senior writing project under the direction of a faculty member; this is typically carried out in MATH 4933. An honors senior thesis will satisfy this requirement. It is recommended that MATH 2701 and MATH 2803 be taken as early as possible in the program.
4033, and STAT 4043. Strongly recommended electives in this program are STAT 5103 and STAT 5113.

All of the mathematics and statistics electives used in fulfilling the requirements for the bachelor of science in mathematics must be approved by the student's adviser.

A 2.00 cumulative grade-point average on all work completed in the department of mathematical sciences will be required for graduation with a B.A. or B.S. degree.

---

**Mathematics, B.S., Option 1 (Applied)**

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

### Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1013</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>† MATH 2554</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>US History</td>
<td>Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Social science/state core requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1013 Elementary II world language course</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1023</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>† MATH 2564</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2701</td>
<td>Survey of Higher Mathematics</td>
<td>1</td>
</tr>
<tr>
<td>CSCE 2004</td>
<td>Programming Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Science Sequence 1 (continued)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 2574</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>CSCE 2004</td>
<td>Programming Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Social Science/state core requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Science Sequence 1 (continued)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 2584</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>† MATH 3093</td>
<td>Abstract Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Social science/state core requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Fine arts, PHIL requirement, or non-PHIL humanities requirement (as needed)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

### Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 3113</td>
<td>Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>† STAT 3013</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CSCE 2014</td>
<td>Programming Foundations</td>
<td>4</td>
</tr>
<tr>
<td>† MATH/STAT 3000-4000 Level Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PHIL requirement, non-PHIL humanities course, or fine arts requirement (as needed)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

### Spring Semester Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 3423</td>
<td>Advanced Applied Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>† MATH 4353</td>
<td>Numerical Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Non-PHIL humanities, fine arts or PHIL requirement (as needed)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Fall Semester Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 4513</td>
<td>Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>† MATH 4363</td>
<td>Numerical Methods</td>
<td>3</td>
</tr>
<tr>
<td>4-3 MATH 4443</td>
<td>Complex Variable for Application or † STAT 4003/4001 Statistical Methods and Lab</td>
<td>3</td>
</tr>
<tr>
<td>CSCE 3313</td>
<td>Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>16-17</td>
</tr>
</tbody>
</table>

### Spring Semester Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 4933</td>
<td>Math Major Seminar</td>
<td>3</td>
</tr>
<tr>
<td>12-13 General Electives (as needed to complete 124 degree credit hours)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>124</td>
</tr>
</tbody>
</table>

---

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.

---

### Mathematics, B.S., Option 2 (Pure)

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

### Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1013</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>† MATH 2554</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Science Sequence 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Social science/state core requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1013 Elementary II world language course</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

### Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1023</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>† MATH 2564</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2701</td>
<td>Survey of Higher Mathematics</td>
<td>1</td>
</tr>
<tr>
<td>CSCE 2004</td>
<td>Programming Foundations</td>
<td>3</td>
</tr>
<tr>
<td>Science Sequence 1 (continued)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 2574</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>† MATH 3093</td>
<td>Abstract Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Science Sequence 2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>U.S. history/state/core requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Fine arts, PHIL requirement, or non-PHIL humanities course (as needed)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

### Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 2584</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>† MATH/STAT 3000-4000 Level Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CSCE 2004</td>
<td>Programming Foundations</td>
<td>4</td>
</tr>
<tr>
<td>Science Sequence 2 (continued)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 3113</td>
<td>Introduction to Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>† MATH /STAT 3000-4000 Level Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Social science/state core requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Non-PHIL humanities course, fine arts course or PHIL course requirement (as needed)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

### Spring Semester Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 4513</td>
<td>Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>† MATH 4113</td>
<td>Introduction to Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Social science/state core requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Non-PHIL humanities course, fine arts course or PHIL course requirement (as needed)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Fall Semester Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 4443</td>
<td>Complex Variable for Application</td>
<td>3</td>
</tr>
<tr>
<td>† MATH/STAT 3000-4000 Level Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Social science/state core requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Spring Semester Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>† MATH 4933</td>
<td>Math Major Seminar</td>
<td>3</td>
</tr>
<tr>
<td>† MATH 4523</td>
<td>Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### 124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.

† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.
Mathematics, B.S., Option 3 (Statistics)

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1
3  ENGL 1013 Composition I
4  MATH 2554 Calculus I
4  Science Sequence 1
3  Social science university/state core requirement
17  Semester Hours

Spring Semester Year 1
1  MATH 2701 Survey of Higher Mathematics
4  Science Sequence 1 (continued)
15  Semester Hours

Fall Semester Year 2
4  MATH 2574 Calculus III
3  MATH 3093 Abstract Linear Algebra
4  Science Sequence 2
4  CSCE 2004 Programming Foundations I
15  Semester Hours

Spring Semester Year 2
4  MATH 2584 Differential Equations
3  STAT 3013 Probability and Statistics
3  U.S. History university/state core requirement
3  Fine arts, philosophy or non-PHIL humanities course requirement
4  Science Sequence 2 (continued)
17  Semester Hours

Fall Semester Year 3
3  MATH 3113 Abstract Algebra
4  STAT 4003/4001L Statistical Methods and Lab
3  Science Sequence 3 (3000+ course from Science Sequence 1 or 2)
3  Fine arts, philosophy or non-PHIL humanities requirement (as needed)
3  Social science university/state core requirement
16  Semester Hours

Spring Semester Year 3
4  MATH 4353 Numerical Linear Algebra
3  MATH/STAT 3000-4000 Level Elective
3  Social science university/state core requirement
6  General Electives
15  Semester Hours

Fall Semester Year 4
4  MATH 4513 Advanced Calculus I
3  STAT 4033 Nonparametric Statistical Methods
3  Fine arts, philosophy or non-PHIL humanities requirement (as needed)
6  General Electives
15  Semester Hours

Spring Semester Year 4
3  MATH 4933 Math Major Seminar
3  STAT 4043 Sampling Techniques
8  General Electives (as needed to meet 124 hour requirement)
14  Semester Hours
124  Total Hours

‡ Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.
† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Requirements for Departmental Honors in Mathematics: The Departmental Honors Program in Mathematics is designed for the superior student and is intended to help the student develop a more comprehensive view of the nature of mathematics. The program provides a vehicle for the recognition of the achievements of work beyond the usual course of study and earns the student the distinction “Mathematics Scholar Cum Laude” at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate’s program of honors studies.

Graduation with honors: The candidate must satisfy the requirements set forth by the Honors Council. The candidate must also obtain at least a 3.50 grade-point average in mathematics courses numbered MATH 2554, MATH 2564, MATH 2574, MATH 2584, MATH 3093, MATH 3113, and MATH 4513, as well as in the additional mathematics courses necessary to complete the requirements for the chosen option. In addition, a grade of “D” or “F” in any other course offered by the department disqualifies a student for honors.

Candidates must take one year of honors mathematics in their senior year. This course will require an acceptable paper and will carry two hours of credit per semester. The quality of this paper, along with the execution of the rest of the student’s honors program including the overall academic performance, will be used in determining the distinction between Honors and High Honors.

Requirements for a Minor in Mathematics: MATH 2564; either MATH 2603 or MATH 2803; and 3 courses selected from MATH 2574, MATH 2584, or any MATH or STAT courses at the 3000-level or higher.

Requirements for a Minor in Statistics: MATH 2554 and 12 hours of non-cross-listed courses in the statistics section of this catalog, including 9 hours in courses numbered 3000 and above. A student must notify the department of his or her intent to minor.

Mathematics (B.A. or B.S.) Teacher Licensure Requirements:

Please refer to the Secondary Education Requirements for Fulbright College. Students on page 125.

Students wanting to teach mathematics in middle school should consult with a middle level adviser in the College of Education and Health Professions.

Advising Note: Students in Fulbright College of Arts and Sciences who, in the opinion of the department of mathematical sciences, need additional work in the fundamentals are required to take MATH 0003. Using the student’s record and their ACT or Mathematics Placement Test scores, a student’s adviser will suggest enrollment in appropriate courses (a mathematics ACT score below 19 indicates placement in MATH 0003).

Statistics (STAT)
Laurie Meaux
Chair of Studies
301 Science and Engineering
479-575-3351

FACULTY
• Associate Professors Meaux, Petris
• Assistant Professor Song

Requirements for a Minor in Statistics: MATH 2554 and 12 hours of non-cross-listed courses, including 9 hours in courses numbered 3000 and above. A student must notify the department of mathematical sciences of his or her intent to minor.

MEDICAL SCIENCES AND DENTISTRY

See page 128, under Combined Academic and Medical or Dental Degree and also the discussion of the pre-medical programs and the pre-dental program under the section on Health Related Professions.
MEDIEVAL AND RENAISSANCE STUDIES (MRST)

William Quinn
Chair of Studies
Jacob Lewis
Assistant Director
333 Kimpel Hall
479-575-4301
http://mrst.uark.edu

FACULTY

• Professors Candido, Coon, Duval, Goodstein-Murphree, Jacobs, Levine, Markham, Quinn, Spellman, Stephens, Wolpert
• Associate Professors Adler, Brock, Fredrick, Kahf, Senor, Sexton

* Assistant Professors Antov, Ruiz, Smith

The Medieval and Renaissance studies minor is administered by the Humanities program. This minor encourages undergraduate students to pursue an interdisciplinary study of all aspects of the Middle Ages and Renaissance as a complement to their major field of study.

Requirements for a Minor in Medieval and Renaissance Studies (MRST):

15 credit hours required:

- HIST 1113H or HIST 1113, Honors World Civilization I or non-honors section, or HUMN 1124H (the Medieval segment of the Honors Humanities Project) and complete at least 12 additional credit hours selected from the courses listed below or approved by the Chair of Studies. A maximum of 6 hours may be presented from courses taken in the student’s designated major.

Required Core Course (3 hours)

- HUMN 1124H Honors Equilibrium of Cultures, 500-1600 CE or HIST 1113H Honors World Civilization I (may also be taken as non-honors, HIST 1113 World Civilization I)

12 hours of electives to be chosen from the following (a maximum of six hours may be presented from courses taken in the student’s major department):

ARHS 4843 Medieval Art
ARHS 4853 Italian Renaissance Art
ARHS 4863 Northern Renaissance Art
ARCH 2233 History of Architecture I
ARCH 4023 Advanced Architectural Studies
DRAM 4773 Acting Shakespeare
ENGL 3433 Introduction to Chaucer
ENGL 4303 Introduction to Shakespeare
LATN 5633 Medieval Latin
SPAN 5203 Medieval Spanish Literature
HIST 3033 Islamic Civilization
HIST 3513 History of China to 1644
HIST 4043 Late Antiquity and the Early Middle Ages
HIST 4053 Late Middle Ages
HIST 4073 Renaissance and Reformation, 1300-1600
HIST 4163 Tudor-Stuart England, 1485-1714
HIST 4353 Middle East, 600-1500
HIST 4373 Mongol and Mamluk Middle East, 1250-1520
HIST 4393 Early Modern Islamic Empires (1300-1750)
HUMN 3923H Honors Colloquium (when offered as a MRST course)
HUMN 425V Special Topics Colloquium (when offered as a MRST course)
MUHS 3703 History of Music to 1750
PHIL 4013 Platonism and the Origin of Christian Theology
PHIL 4023 Medieval Philosophy

MIDDLE EAST STUDIES (MEST)

Joel Gordon
Director, King Fahd Center for Middle East Studies
202 Old Main
479-575-4157
http://mest.uark.edu
mest@uark.edu

FACULTY

• Professors Farah (curriculum and instruction), Gordon (history), Haydar (A.) (world languages), Paradise (geosciences-geography), Rose (anthropology), Swedenburg (anthropology)
• Associate Professors Casana (anthropology), Ghadbian (political science), Kahf (comparative literature)
• Assistant Professor Antov (history)
• Instructor Haydar (P.)

Students interested in the Middle East and North Africa and wishing to maximize their potential for academic, business, professional, or government careers related to the area, may earn a major in Middle East studies with a required primary major in an approved area such as anthropology, economics, world languages, geography, history, journalism, and political science. New students entering the program are required to notify both the major adviser and the MEST director of their intention to participate. Freshmen and sophomores considering this program are advised to begin their study of a Middle East language as early as possible. Students may also earn a minor in Middle East studies.

Requirements for a Combined Major in MEST: To attain a major in MEST, the student is required to have a primary major in one of the following approved areas: anthropology, communication, economics (BA), French, geography, history, international relations, journalism, political science, sociology, or Spanish. Up to nine hours of courses in the primary major with Middle East content may be counted toward the MEST combined major with the permission of the MEST director.

Total Hours Required: (30 semester hours) Students must complete 3 hours in Introduction to Middle East Studies (MEST 2013), 3 hours in the MEST Colloquium (MEST 4003), 6 hours of Arabic language beyond ARAB 2016, and 18 hours in additional MEST or MEST-approved core courses. MEST courses must be in at least two disciplines, with no fewer than 9 hours of MEST core courses in one discipline.

Introduction to Middle East Studies: (3 hours) Students must complete 3 hours of Introduction to Middle East Studies (MEST 2013).

Middle East Studies Colloquium: (3 hours) Students must complete at least 3 hours in the Middle East Studies Colloquium (MEST 4003). The Colloquium may be repeated with a change of subject for a maximum of 6 credits.

Arabic Requirement: (6 hours of MEST credit) Students must complete 6 hours of Arabic language beyond the Fulbright College language proficiency requirement (ARAB 2013). Courses approved by the MEST director and completed in a summer intensive Arabic program or study-abroad program in an Arabic speaking country may substitute for all or part of this requirement.

MEST Core Courses: To count for MEST credit, courses not on the following list must be approved by the student’s MEST major adviser and the MEST director. Individualized readings, directed research courses, or courses in a second Middle Eastern language may count as MEST core courses with the approval of the MEST major adviser and MEST director.

MEST Core Courses:

- ANTH 3123 Anthropology of Religion
- ANTH 3033 Egyptology
- ANTH 4123 Ancient Middle East
- ANTH 4256 Archeological Field Session
Requirements for a Minor in Middle East Studies:

- **Total Hours Required:** (18 semester hours)
- Students must complete MEST 2003 Islam: History and Practice.
- MEST 2004/2005 Introduction to Middle East Studies (3 hours).
- MEST 4003 Middle East Studies Colloquium (6 hours).
- MEST 4003H Honors Middle East Studies Colloquium (6 hours).
- MEST Core Courses: (6 hours) Students must complete an additional 6 hours of MEST core courses.
- Arabic Requirement: (6 hours of MEST credit) Students must complete 6 hours of Arabic language beyond the Fulbright College language proficiency requirement (ARAB 2016).
- Piano Proficiency Requirement: (6 hours of MEST credit) Students must complete 6 hours of Arabic language beyond the Fulbright College language proficiency requirement (ARAB 2016).
- Courses approved by the MEST director and completed in a summer intensive Arabic program or study-abroad program in an Arabic-speaking country may substitute for all or part of this requirement.
- MEST Core Courses: (6 hours) Students must complete an additional 6 hours of MEST core courses supervised by faculty participating in the program. Students choosing to take individualized reading or directed research courses as a part of the minor must obtain the approval of the MEST director and their major advisor.

Requirements for Honors in MEST:
- The Honors Program in Middle East Studies gives junior and senior students of high ability the opportunity to enroll in enriched courses and conduct independent research culminating in an honors thesis. In addition to satisfying the general Fulbright College requirements for graduation and the basic eligibility requirements for honors as established by the Honors Council, candidates for honors in Middle East Studies must complete 12 hours of honors credit in partial satisfaction of requirements for the co-major. One to 6 of these hours may be thesis hours (MEST 399VH).
- The preferred method for satisfying the remaining hours is to enroll in the colloquium at least once for honors credit (MEST 4003H) and to take relevant honors colloquia or graduate courses (with permission) in one of the departments contributing to this interdisciplinary area study. The thesis committee shall include a representative from the major discipline (in the case of multiple majors, from the discipline contributing most significantly to the topic). Successful completion of these requirements will be recognized by the award of the distinction “Middle East Studies Scholar Cum Laude” at graduation. Higher degree distinctions are recommended only in exceptional cases and are based upon the whole of the candidate’s program of honors studies.

Degrees in Music:
- Two baccalaureate degrees in music are available: the Bachelor of Music and the Bachelor of Arts with a Major in Music. To achieve junior standing in the curriculum leading to the Bachelor of Arts degree with a major in music and the Bachelor of Music degree, the student must have completed 56 hours and must have maintained a cumulative grade average of “C” in all music courses, with the exception of ensemble, by the end of the fourth semester. The student must also have earned a grade average of not less than “B” in the major applied field of study during the sophomore year. This standing is prerequisite to all 3000-level courses and above in music.
- Pursuant to enrolling in music courses, all music majors must audition for the music department faculty. Private study of the primary voice/instrument for music majors requires the successful completion of an audition for the instructor and consent of the Department of Music. Music majors are expected to own their own instruments. Some instruments are provided for student use only in certain circumstances and at the discretion of the music department.
- All music majors are required to enroll in an ensemble in each semester of residence appropriate to their major applied area and with the consent of their advisor. All music majors, with exceptions noted below, are required to enroll in MUEN 1411 Concert Choir during the first year of residence. Exceptions to the requirement would include all students pursuing the Bachelor of Music (B.M.) degree for whom voice or piano is the major applied area.
- **Piano Proficiency Requirement:** Students pursuing a Bachelor of Music degree must pass a piano proficiency examination upon entering the University of Arkansas or must register in piano classes until this requirement is met. Students with previous piano training may take a piano placement exam and be advised to omit one or more semesters of Class Piano (MUAC 1221, 1231, 2221). Students will receive college credit for the omitted class piano courses if they validate their higher placement by passing an advanced piano course with a grade of “B” or better.
- On the basis of prior study in music, a student may be advised to omit one or more semesters of Aural Perception (MUTH 1621, MUTH 1631, MUTH 2621). Students will receive college credit for the omitted aural perception courses when they have validated their higher placement by passing the course in which they are placed with a grade of “B” or better.
- **Writing Requirement:** Students can meet the Fulbright College writing require-
ment by submission of a satisfactory term paper for MUED 4112 (music education majors) or MUHS 4253 (all other music majors).

Requirements for a Major in Music leading to a Bachelor of Music Degree:
In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

Students must complete:
A world language course at the 1013 Elementary II level. NOTE: 1003 Elementary I, if taken prior to 1013 Elementary II, usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.

HIST 1113 World Civilization I and HIST 1123 World Civilization II
And all of the following specific requirements for one of the following major areas of emphasis. All students must complete two semesters of MUAP 110V with a grade of "A" or "B" and two semesters of MUAP 210V with a grade of "A" or "B" before enrolling in MUAP 310V.

Piano Performance Major: MLIT 1013, MUTH 1603, MUTH 1621, MUTH 1631, MUTH 2603, MUTH 2621, MUTH 2631, MUTH 3603, MUTH 3613, MUTH 4703, MUTH 4322; MUAC 2111, MUAC 2121; MUHS 3703, MUHS 3713, MUHS 4253, MUHS 4803, MUHS 4813; Applied Piano 28 hours: MUAP 110V (6 hours), MUAP 210V (6 hours), MUAP 310V (7 hours), MUAP 410V (1 hour), and MUAP 4201; Applied Secondary MUAP or MUAC (2 hours) MUPD 3801, and MUPD 3811 or MUPD 3861; MUPD 4863; MUEN 1411/2411/3411/4411 Concert Choir (2 hours), MUEN 1541/2541/3541/4541/4841 Accompanying (6 hours).

Voice Performance Major: MLIT 1013, MUTH 1603, MUTH 1621, MUTH 1631, MUTH 2603, MUTH 2621, MUTH 2631, MUTH 3603, MUTH 3613, MUTH 4703; MUAC 1221, MUAC 1231, MUAC 2221, MUAC 2231; MUAC 2111, MUAC 2121; MUHS 3703, MUHS 3713, MUHS 4253, MUHS 4763, MUHS 4773; Applied Voice 24 hours: MUAP 110V (6 hours), MUAP 210V (6 hours), MUAP 310V (5 hours), MUAP 2001 (5 hours), MUAP 2011 (5 hours), MUAP 2021 (5 hours), MUAP 3001 (5 hours), MUAP 3011 (5 hours), MUAP 4001 (5 hours), MUAP 4011 (5 hours), MUAP 4021; MUAC 1221, MUAC 1231, MUAC 2221, MUAC 2231; 7 additional MUAC to consist of MUAC 1301, MUAC 1311, MUAC 1321, MUAC 1331, MUAC 1341, MUAC 1351, MUAC 1361, MUAC 2141, and either MUAC 1301 or MUAC 1311; MUHS 3703, MUHS 3713; Applied Instrument 14 hours: MUAP 110V (4 hours), MUAP 210V (4 hours), MUAP 310V (4 hours), MUAP 410V (1 hour), MUAP 3201; MUEN 1411 Concert Choir (1 hour); Marching BandMUEN1441/2441/3441/4441 or 4941 (2 hours); and 6 MUEN selected from Symphony Orchestra (MUEN 1431/2431/3431/4431/4631), Marching Band (MUEN 1441/2441/3441/4441/4941), Wind Symphony (MUEN 1461/2461/3461/4461/4661), Campus Band (MUEN 1481/2481/3481/4481/4681), Symphonic Band (MUEN 1511/2511/3511/4511/4611), MUPD 3801, MUPD 3811, MUPD 3861, MUPD 3881.

Applied major-level courses 16 hours: (MUAP 110V/130V/210V/230V/310V/330V/410V or 415V); MUAP 4201 Composition Recital; MUEN 1411 Concert Choir (1 hour); Ensemble (8 hours; see adviser for ensemble selection).

MUAP 310V (7 hours), MUAP 3201, MUAP 410V (7 hours), MUAP 4201; MUEN 1411 Concert Choir (1 hour); Ensemble (8 hours; see adviser for ensemble selection).

Music Education, Instrumental/Woodwind/Brass/Percussion: MLIT 1013, MUTH 1603, MUTH 1621, MUTH 1631, MUTH 2603, MUTH 2621, MUTH 3603, MUTH 3613, MUTH 4612; MUAC 1221, MUAC 1231, MUAC 2221, MUAC 2231; MUAC 2111, MUAC 2121; additional MUAC to consist of MUAC 1331, MUAC 1341, MUAC 1351, MUAC 1361, MUAC 1371, MUAC 2141, and either MUAC 1301 or MUAC 1311; MUHS 3703, MUHS 3713; Applied Instrument 14 hours: MUAP 110V (4 hours), MUAP 210V (4 hours), MUAP 310V (4 hours), MUAP 410V (1 hour), MUAP 3201; MUEN 1411 Concert Choir (1 hour); Marching BandMUEN1441/2441/3441/4441 or 4941 (2 hours); and 6 MUEN selected from Symphony Orchestra (MUEN 1431/2431/3431/4431/4631), Marching Band (MUEN 1441/2441/3441/4441/4941), Wind Symphony (MUEN 1461/2461/3461/4461/4661), Campus Band (MUEN 1481/2481/3481/4481/4681), Symphonic Band (MUEN 1511/2511/3511/4511/4611), MUPD 3801, MUPD 3811, MUPD 3861, MUPD 3881.

Music Education, Instrumental/Strings: MLIT 1013, MUTH 1603, MUTH 1621, MUTH 1631, MUTH 2603, MUTH 2621, MUTH 3603, MUTH 3613, MUTH 4612; MUAC 1221, MUAC 1231, MUAC 2221, MUAC 2231; MUAC 2111, MUAC 2121; 7 additional MUAC to consist of MUAC 1331, MUAC 1341, MUAC 1351, MUAC 1361, MUAC 1371, and two additional courses chosen from MUAC 1331, MUAC 1341, and MUAC 2141; MUHS 3703, MUHS 3713; Applied Strings 14 hours: MUAP 110V (4 hours), MUAP 210V (4 hours), MUAP 310V (4 hours), MUAP 410V (1 hour), MUAP 3201; MUEN 1411 Concert Choir (1 hour); Marching BandMUEN1441/2441/3441/4441 or 4941 (2 hours); and 6 MUEN selected from Symphony Orchestra (MUEN 1431/2431/3431/4431/4631), Marching Band (MUEN 1441/2441/3441/4441/4941), Wind Symphony (MUEN 1461/2461/3461/4461/4661), Campus Band (MUEN 1481/2481/3481/4481/4681), Symphonic Band (MUEN 1511/2511/3511/4511/4611), MUPD 3801, MUPD 3811, MUPD 3861, MUPD 3881.

MUED 2012, MUED 3801, MUED 3833, MUED 4112, MUED 4293; MUPD 3801, MUPD 3881.

MUED 2012, MUED 3801, MUED 3833, MUED 4112, MUED 4293; MUPD 3801, MUPD 3881.
(4 hours), MUAP 410V (1 hour), and MUAP 3201; 8 MUEN selected from Concert Choir (MUEN 1411/2411/3411/4411/4611) or Schola Cantorum (MUEN 1451/2451/3451/4451/4651); 2 MUAP 1001 Piano, 1 MUAP/MUAC by advisement; MUPD 3801, MUPD 3861; MUED 2012, MUED 3021, MUED 3833, MUED 4112, MUED 4283

Music Education, Choral/Piano: MLIT 1013, MUTH 1603, MUTH 1621, MUTH 1631, MUTH 2603, MUTH 2621, MUTH 2631, MUTH 3613, MUTH 4612; MUAC 1121, MUAC 1141, MUAC 1151; MUAC 2111, MUAC 2121; 3 additional MUAC to include MUAC 1371, 1 of MUAC 1301 or MUAC 1311, and 1 of MUAC 1331, MUAC 1341, MUAC 1351, MUAC 1361, or MUAC 2141; MUHS 3703, MUHS 3713;

Applied Piano: MUAP 110V (4 hours), MUAP 210V (4 hours), MUAP 310V (4 hours) and MUAP 410V (1 hour), MUAP 3201; 4 MUAP from 1001/2001/3001 or 4001 Voice; MUPD 3801, MUPD 3861; 8 MUEN selected from Concert Choir (MUEN 1411/2411/3411/4411/4611) or Schola Cantorum (MUEN 1451/2451/3451/4451/4651); MUED 2012, MUED 3021, MUED 3833, MUED 4112, MUED 4283.

Students who wish to apply for admission to the internship program in music education must complete the following stages.

Stage I: Complete an Evaluation for Internship
Students must meet the following criteria to be cleared for the internship:
1. Declare the major in music education in the Fulbright Advising Center, 518 Old Main.
2. Successful completion of the PRAXIS I test by meeting or exceeding the Arkansas Department of Education cut-off scores. This test should be taken after the student has completed 30 credit hours and upon completion of ENGL 1013, ENGL 1023, and MATH 1203.
3. Obtain a "C" or better in the following pre-education core courses: CIED 3023, CIED 3033. (PSYC 2003 is a prerequisite.)
4. Obtain a "C" or better in MUED 2012, MUED 3021, MUED 3833, MUED 4112, and one of MUED 4273, or 4283, or 4293.
5. Satisfactory completion of the Evaluation for Internship form. The evaluation form must be completed by October 1 prior to doing a fall internship or March 1 prior to doing a spring internship. The completed form must be returned to the Coordinator of Teacher Education, 8 Peabody Hall, no later than the stated deadline.
6. Complete the B.M. degree with a cumulative GPA of 2.50 or higher. The degree must be eligible to be posted to your University of Arkansas transcript at the Registrar’s Office prior to internship.
7. Obtain departmental clearance for internship based on successful completion of portfolios, evaluation for internship, GPA requirements, course work requirements, selected written recommendations, an interview, and/or other requirements specified by your program.

All requirements in Stage I must be met to be cleared for the internship. Please contact the Coordinator of Teacher Education, 8 Peabody Hall, College of Education and Health Professions for more information.

Stage II: Internship
1. Complete the one-semester internship at an approved site in Washington or Benton counties.
2. Complete PRAXIS II requirements if planning to apply for Arkansas Licensure (recommended, but not required for degree completion). See your adviser for completion dates.

NOTE: Students should always consult the Coordinator of Teacher Education for any licensure requirement changes. Students will not be licensed to teach in Arkansas until they have met all requirements for licensure as set forth by the Arkansas Department of Education.

Usually licensure in another state is facilitated by acquiring a license in Arkansas. An application in another state must be made on the application form of that state, which can be obtained by request from the State Teacher Licensure office in the capital city. An official transcript should accompany the application. In many instances the applications are referred to the Coordinator of Teacher Education to verify program completion in teacher education.

Requirements for a Major in Music leading to a Bachelor of Music Degree

with Elective Studies in Business: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met.

Students must complete a world language course at the 1013 Elementary II level. NOTE: 1003 Elementary I, if taken prior to 1013 Elementary II, usually will not count toward the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.

And all of the following:
MLIT 1013, MUTH 1603, MUTH 1621, MUTH 1631, MUTH 2603, MUTH 2621, MUTH 2631, MUTH 3613, MUHS 3703, MUHS 3713, MUHS 4253; Applied instrument/voice 14 hours: MUAP 110V (4 hours), MUAP 210V (4 hours), MUAP 310V (4 hours), MUAP 410V (1 hour), and MUAP 3201; MUPD 3801; MUEN 1411 Concert Choir (1 hour); 7 MUEN to be selected with the consent of the student's adviser; plus the student must declare one concentration for a Business Administration Minor for Non-Business Students and fulfill all requirements for that declared minor.

Requirements for a Major in Music leading to a Bachelor of Arts Degree: This program is for undergraduates who wish to major in music as part of a liberal arts program. In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

3-9 – Completion of 2013 Intermediate II of any world language. (This is usually accomplished through completion of a sequence of three language courses: 1013, 2013 and 3013. NOTE: 1003 usually will not count toward the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)
6 – HIST 1113 World Civilization I and HIST 1123 World Civilization II
3 – PHIL 2003 Introduction to Philosophy
3 – WLIT 1113 World Literature I

A minimum of 39 semester hours in music to include: MLIT 1013, MUTH 1603, MUTH 1621, MUTH 1631, MUTH 2603, MUTH 2621, MUTH 2631, MUTH 3603, MUTH 3613, MUAC 1221, MUAC 1231; MUHS 3703, MUHS 3713, MUHS 4253; 8 hours of applied study on voice or on one instrument MUAP 110V (4 hours), MUAP 210V (4 hours), MUAP 310V (4 hours), MUAP 410V (1 hour), and MUAP 3201; MUPD 3801; MUEN 1411 Concert Choir (1 hour); and 4 hours (4 semesters) of ensemble to be selected with the consent of their advisers.

Requirements for Departmental Honors in Music: The Departmental Honors Program in Music provides upper-division undergraduate students an opportunity to participate formally in scholarly, creative, or performance music activities. Honors candidates carry out independent study, research and performance under the guidance of the music faculty and participate in special honors classes and seminars. They must take 12 hours (which may include 6 hours of thesis) in Honors Studies.

Each honors student will be required to select an honors committee. The committee will be comprised of the honors thesis advisor (a Music Department faculty member and major teacher in the area of the honors project), a second faculty member from the Music Department chosen by the student, a member from outside the music department chosen by the student, and a member of the Honors Council appointed by the Honors College. This committee is responsible for hearing and seeing the work of the student in the area of the honors project and will administer the oral examination to the candidate at the end of the last semester of the student's work. The committee then recommends to the Honors Council whether or not the student receives honors in music. Outstanding student achievement will be recognized by awarding the distinction “Music Scholar Cum Laude” at graduation. The award of higher degree distinctions is recommended only in truly exceptional cases and is based upon the whole of the candidate's program of honors studies.

The student may elect to do the honors project in one of six areas: performance, music history and literature, theory, composition, music education, or ethnomusical-
ogy. Honors work may be done in an area other than the student’s major area that is, a student majoring in voice performance may elect to do honors work in music history, theory, or composition, etc.

If a student wishes to devise his or her own honors project in consultation with a supervising professor and with the permission of the department chair, he or she may be granted honors. If a student wishes to combine work in more than one field and if the committee approves, he or she may be granted honors in more than one area, although the designation on the diploma will read “in music.”

The requirements for work in each area are as follows:

1. Performance
   a. 2 semesters of MUAP 310V or MUAP 410V, with concurrent registration in MUAP 3201H and MUAP 4201H
   b. Other music department honors courses are recommended, see honors adviser. (A program file representing the student’s range of performance activities during the junior and senior years will be maintained for the department file and for the Honors Council. Compact discs of the junior and senior recitals will be filed with the Honors Office.)

2. History and Literature
   a. Junior year: MUHS 5973 Seminar in Bibliography and Methods of Research
   b. Senior year: MUSC 490VH Honors Essay

3. Theory
   a. Junior year: MUHS 5973 Seminar in Bibliography and Methods of Research
   b. Senior year: MUSC 490VH Honors Essay

4. Composition
   a. At least six hours of MUTH 364VH Honors Composition III or MUTH 464VH Honors Composition IV
   b. A full program of original compositions or equivalent.

5. Music Education
   a. Junior year: MUED 5513 Seminar: Resources in Music Education
   b. Senior year: MUSC 490VH Honors Essay

6. Ethnomusicology
   a. Junior year: MUHS 5973 Seminar in Bibliography and Methods of Research
   b. Senior year: MUSC 490VH Honors Essay

Sample Music B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program, and should consult their music adviser for an eight-semester plan that is specific to their vocal, instrumental or theoretical emphasis area in music. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I</td>
<td>3 MATH 1203 College Algebra or any higher level math</td>
<td>3 MUTH 1003 Basic Musicianship (if required) or 1013 Elementary II language course (or higher, depending on placement in sequence)</td>
<td>1 MUAC 1221 Piano for Music Majors I (fall only)</td>
<td></td>
</tr>
<tr>
<td>2 MUAP 110V Applied Major Voice/Instrument I (usually 2 hours)</td>
<td>1 MUEN Music Ensemble I (see adviser)</td>
<td>3 MUTH 1013 Music Lecture for Music Majors or HIST 1113 or HIST 1123</td>
<td>16 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1023 Composition II</td>
<td>3 2003 Intermediate I world language course (or begin with 1013 Elementary II language course, as needed)</td>
<td>3 MUTH 1603 Music Theory I (spring only)</td>
<td>1 MUTH 1621 Aural Perception I</td>
<td></td>
</tr>
<tr>
<td>1 MUAC 1231 Piano for Music Majors II (spring only)</td>
<td>2 MUAP 110V Applied Major Voice/Instrument I (usually 2 hours)</td>
<td>1 MUEN 1411 Concert Choir I (required for freshmen)</td>
<td>16 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 MUTH 2603 Music Theory II</td>
<td>1 MUTH 1631 Aural Perception II</td>
<td>2 MUAP 210V Applied Major Voice/Instrument II (usually 2 hours)</td>
<td>1 MUEN Music Ensemble II (see adviser)</td>
<td></td>
</tr>
<tr>
<td>3 MUTH 1013 Music Lecture for Music Majors or HIST 1113 or HIST 1123</td>
<td>16 Semester Hours</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 2</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 †Advanced Level Elective</td>
<td>3 †MUTH 3603 Music Theory III</td>
<td>1 MUTH 2621 Aural Perception III</td>
<td>2 MUAP 210V Applied Major Voice/Instrument II (usually 2 hours)</td>
<td></td>
</tr>
<tr>
<td>1 MUEN Music Ensemble II (see adviser)</td>
<td>3 †MUHS 3703 History of Music to 1800</td>
<td>3 †Advanced Level Elective</td>
<td>3 2013 Intermediate II world language course (as needed) or General Elective</td>
<td></td>
</tr>
<tr>
<td>† University/state core U.S. history requirement or PHIL 2003 Intro to Philosophy (as needed)</td>
<td>16 Semester Hours</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 3</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 †MUTH 3613 Music Theory IV</td>
<td>1 MUTH 2631 Aural Perception IV</td>
<td>3 †MUHS 3703 History of Music to 1800</td>
<td>3 †Advanced Level Elective</td>
<td></td>
</tr>
<tr>
<td>4 Science University/state core lecture with corequisite lab requirement</td>
<td>16 Semester Hours</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 3</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 †MUHS 3713 History of Music from 1800</td>
<td>3 WLT 1113 World Literature I</td>
<td>4 Science University/state core social science requirement (non-HIST)</td>
<td>3 †Upper Level Elective</td>
<td></td>
</tr>
<tr>
<td>3 †‡MUHS 4253 Special Topics in Music History</td>
<td>3 †‡MUED 5513 Seminar: Resources in Music Education</td>
<td>3 †‡MUTH 3613 Music Theory IV</td>
<td>16 Semester Hours</td>
<td></td>
</tr>
<tr>
<td>3 †‡Upper Level Elective from Fulbright College</td>
<td>3 †Upper Level Elective from Fulbright College</td>
<td>5 General Electives</td>
<td>15 Semester Hours</td>
<td></td>
</tr>
<tr>
<td>5 General Electives</td>
<td>124 Total Hours</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 4</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 †Upper Level Elective from Fulbright College</td>
<td>3 †Upper Level Elective from Fulbright College</td>
<td>3 †Upper Level Elective</td>
<td>15 Semester Hours</td>
<td></td>
</tr>
<tr>
<td>6 General Electives</td>
<td>124 Total Hours</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sample Music B.M., Music Education

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program, and should consult their music adviser for an eight-semester plan that is specific to their vocal, instrumental or theoretical emphasis area in music. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

For this sample, the Music Activity Course Group requires seven 1-hour classes: MUAC 1331, 1341, 1351, 1361, 1371, 2141, and either 1301 or 1311.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I</td>
<td>3 MUTH 1003 Basic Musicianship (if required) or General Elective</td>
<td>3 MUTH 1013 Music Lecture for Music Majors or HIST 1113 or HIST 1123 (as needed)</td>
<td>17 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

University of Arkansas, Fayetteville

The YOU of A

J. William Fulbright College of Arts and Sciences
Sample Music B.M., Music Performance

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program, and should consult their music adviser for an eight-semester plan that is specific to their vocal, instrumental or theoretical emphasis area in music. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Students in the Voice Performance major are required to take 9 hours of world language in addition to the major requirement of completion of a world language at the 1013 Elementary II level so that at least 3 hours each of French, German, and Italian are taken.

Fall Semester Year 1

3 ENGL 1013 Composition I
0-3 MUTH 1003 Basic Musicianship (if required)
1 MUAC 1121 Italian for Singers
3 MUAP 110V Applied Major Voice/Instrument I
1 MUAC 1221 Piano for Music Majors I (fall only)
1 MUEN Music Ensemble I (see adviser)
1 One course from Music Activity Group (see below)
15 Total Hours

Spring Semester Year 1

3 ENGL 1023 Composition II
3 MUTH 1603 Music Theory I (spring only)
1 MUTH 1621 Aural Perception I
1 MUAC 1231 Piano for Music Majors II (spring only)
2 MUAP 110V Applied Major Voice/Instrument I
1 MUED 210V Applied Major Voice/Instrument I II
1 MUEN Music Ensemble II (see adviser)
3 HIST 1113 World Civilization I
1 One course from Music Activity Group (see below)
17 Total Hours

Fall Semester Year 2

3 †‡MUAP 210V Applied Major Voice/Instrument II
1 †‡MUEN Music Ensemble III (see adviser)
1 †‡MUTH 2603 Music Theory II (MUTH 1603)
1 †‡MUTH 3613 Music Theory IV
3 †‡MUED 3833 (as needed)
1 †‡MUAC 2231 Piano for Music Majors IV (spring only)
2 †‡MUAP 310V Applied Major Voice/Instrument III
3 †‡MUHS 3703 History of Music to 1800
1 †‡MUPD 3801 Conducting I
3 †‡MUHS 3713 History of Music 1800-present (MUHS 3703)
1 †‡MUPD 3811 Conducting II: Instrumental Music
1 †‡MUED 3021 Supervised Practicum in Teaching Musical Skills
1 One course from Music Activity Group (see below)
3 †‡MUAP 3023 or †‡CIED 3033 (PSYC 2003) or †‡MUED 3833 (as needed)
3 MATH 1203 College Algebra or higher-level math
15 Total Hours

Spring Semester Year 2

2 †‡MUAP 410V Applied Major Voice/Instrument IV
3 †MUAP 4112 Pedagogy in Music Education
3 †‡MUAP 4293 Instrumental Methods
1 †‡MUEN Music Ensemble IV (see adviser)
4 Science university/state core lecture with corequisite lab requirement
3 University/state core US history or humanities requirement
1 One course from Music Activity Group (see below)
1-2- †‡MUAP 4201/ †‡MUAP 3201 Advanced Major Voice/Instrument IV/Recital I (or in Spring Semester 4)
2 †‡MUED 4112 Pedagogy in Music Education
3 †‡MUAP 4293 Instrumental Methods
3 †‡MUAP 4293 Instrumental Methods
4 Science university/state core lecture with corequisite lab requirement
3 University/state core US history or humanities requirement
1 One course from Music Activity Group (see below)
15-16 Total Hours

Fall Semester Year 3

3 †‡MUAP 410V/ †‡MUAP 3201 Advanced Major Voice/Instrument IV/Recital I (or in Fall Semester 4)
1 †‡MUED 4112 Pedagogy in Music Education
3 †‡MUAP 4293 Instrumental Methods
1 †‡MUEN Music Ensemble IV (see adviser)
3 †‡MUHS 3703 History of Music to 1800
1 †‡MUHS 3713 History of Music 1800-present (MUHS 3703)
1 †‡MUPD 3811 Conducting II: Instrumental Music
1 †‡MUED 3021 Supervised Practicum in Teaching Musical Skills
1 One course from Music Activity Group (see below)
3 †‡MUAP 3023 or †‡CIED 3033 (PSYC 2003) or †‡MUED 3833 (as needed)
3 MATH 1203 College Algebra or higher-level math
15 Total Hours

Spring Semester Year 3

2 †‡MUAP 410V Applied Major Voice/Instrument IV
3 †‡MUAP 4293 Instrumental Methods
3 †‡MUAP 4293 Instrumental Methods
4 Science university/state core lecture with corequisite lab requirement
3 University/state core US history or humanities requirement
1 One course from Music Activity Group (see below)
1 †‡MUEN Music Ensemble IV (see adviser)
3 †‡CIED 3023 or †‡CIED 3033 (PSYC 2003) or †‡MUED 3833 (as needed)
4 Science university/state core lecture with corequisite lab requirement
3 University/state core US history or humanities requirement
1 One course from Music Activity Group (see below)
1 General Elective
2 †‡MUAP 410V Applied Major Voice/Instrument IV
1 MUEN Music Ensemble IV (see adviser)
3 †‡MUED 4293 Instrumental Methods
1 †‡MUAP 4293 Instrumental Methods
4 Science university/state core lecture with corequisite lab requirement
3 University/state core US history or humanities requirement
1 One course from Music Activity Group (see below)
1 General Elective
16 Semester Hours

124 Total Hours
## PHILOSOPHY (PHIL)

Thomas D. Senor  
Chair of the Department  
318 Old Main  
479-575-3551  
http://philosophy.uark.edu  
phildept@uark.edu  

**FACULTY**  
- Professor Spellman, Senior  
- Professor Emeritus Nissen  
- Associate Professors Adler, Funkhouser, Lee, Lyons, Minar, Ward  
- Associate Professor Emeritus Edwards  
- Assistant Professor McMullin

**Requirements for a Major in Philosophy:** Students must complete 124 degree credit hours to include the minimum University/state core requirements (see page 41), the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Program Policy), and following course requirements for the major. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

- 3 – from either CLST 1003, HIST 1113 or HIST 1123  
- 3–9 – 2013 Intermediate II of any world language. (World language courses taken are dependent on placement level in sequence. NOTE: 1003, if required, usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)  
- 33 semester hours in philosophy to include:  
  - PHIL 2003  
  - PHIL 2203 or PHIL 4253  
  - PHIL 4003  
  - PHIL 4033  
- Three hours to be chosen from PHIL 4013, PHIL 4023, PHIL 4043, PHIL 4063, PHIL 4073, and PHIL 4123; and PHIL 3983 or a successfully defended honors thesis in philosophy.

**Writing Requirement:** The writing requirement can be satisfied either by completion of an acceptable thesis or by approval of a research/analytical paper from any 4000-level course in philosophy submitted by the student to the Philosophy Department's Undergraduate Committee.

**Requirements for Departmental Honors in Philosophy:** The purpose of the honors program is to provide the honors candidate with the opportunity of achieving greater maturity in dealing with philosophical ideas through independent study. The candidate's plan of study will include the reading of significant philosophical works. Normally a candidate will complete a total of three to six hours of independent readings in philosophy during his or her junior and senior years. In addition, it is recommended that the candidate register for honors courses and colloquia. One colloquium is required.

The candidate will be expected to take 12 hours (which may include 6 hours of thesis) in Honors Studies and to write an essay during his or her senior year and give a satisfactory account of the honors readings and senior essay in an oral examination. Successful completion of the requirements will be recognized by the award of the distinction "Philosophy Scholar Cum Laude" at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate's program of honors studies.

**Requirements for a Combined Major in Philosophy and African and African American Studies:** 36 semester hours, consisting of 18 hours in philosophy and 18 hours in African and African American studies. The philosophy requirement is: 18 semester hours in philosophy to include either 12 hours over 3000 and PHIL 2203 or PHIL 4253, or 15 hours over 3000. The hours over the 3000-level must include at least three hours of value theory to be chosen from PHIL 4113, PHIL 4123, PHIL 4133, or PHIL 4143, and at least six hours in the history of philosophy (PHIL 4003, PHIL 4013, PHIL 4023, PHIL 4033, PHIL 4043, PHIL 4063, PHIL 4073) including PHIL 4003 or PHIL 4033. See African and African American studies on page 135 for details.

---

### Requirements for a Minor in Music: A minimum of 18 semester hours in music courses to include MLIT 1013, MUTH 1603, MUTH 2603, and either MUHS 3703 or MUHS 3713; other courses to be determined by the student in consultation with a music faculty adviser. The student must notify the Department of Music of his/her intent to minor.

For requirements for advanced degrees in music, see the Graduate School Catalog.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>16 Fall Semester Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>†1MUTH 3613 Music Theory IV</td>
</tr>
<tr>
<td>1</td>
<td>†MUTH 2631 Aural Perception IV</td>
</tr>
<tr>
<td>3</td>
<td>†MUHS 3703 History of Music to 1800 (MUH 1013, HIST 1113 and HIST 1123)</td>
</tr>
<tr>
<td>3</td>
<td>†MUHS 4763 Survey of Vocal Literature I or University/state core humanities, U.S. History, or social science requirement (non-HIST)</td>
</tr>
<tr>
<td>3</td>
<td>†MUAP 310V Applied Major Voice/Instrument III</td>
</tr>
<tr>
<td>1</td>
<td>†MUEN Music Ensemble III (see adviser)</td>
</tr>
<tr>
<td>1</td>
<td>†MUPD 3801 Conducting I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15 Spring Semester Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>17 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>124</td>
</tr>
</tbody>
</table>

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.

‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

See Pages 369-374 for Music (MLIT through MUTH) courses
Philosophy B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program as well as page 130 of this chapter for College requirements. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1
- ENGL 1013 Composition I
- MATH 1203 (if required) or any higher level math
- PHIL 2003 Introduction to Philosophy
- 1013 Elementary II world language course (or higher level, depending on placement)
- University/state core fine arts or U.S. history requirement
15 Semester Hours

Spring Semester Year 1
- ENGL 1023 Composition II
- University/state core U.S. history or fine arts requirement
- PHIL 2203 Logic
- 2003 Intermediate I world language course (or higher level)
- General Elective
15 Semester Hours

Fall Semester Year 2
- †‡ PHIL 4003 Ancient Greek Philosophy
- CLST 1003 or HIST 1113 or HIST 1123
- University/state core social science requirement
- Science University/state core lecture and corequisite lab requirement
- 2013 Intermediate II world language course (as needed)
16 Semester Hours

Spring Semester Year 2
- †‡ PHIL 4033 Modern Philosophy
- Advanced Level Elective
- University/state core social science requirement
- General Electives
- Semester Hours
15

Fall Semester Year 3
- † PHIL course from Philosophy Area Group 1
- †‡ PHIL 3000-4000 Level Elective
- University/state core social science requirement (as needed) or General Elective
- Science University/state core lecture and corequisite lab requirement
- Advanced Level Elective
16 Semester Hours

Spring Semester Year 3
- † PHIL course from History of Philosophy Group 2
- Advanced Level Elective
- Advanced Level Elective
- General Electives
- Semester Hours
16

Fall Semester Year 4
- † PHIL course from Philosophy Area Group 1
- †‡ PHIL 3000-4000 Level Elective
- General Electives
- Semester Hours
16

Spring Semester Year 4
- † PHIL 3000-4000 Level Elective
- †‡ PHIL 3983 Capstone Course
- †‡ 3000-4000 Level Elective
- General Electives
- Semester Hours
15
124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Philosophy Area Group 1: Students may take any additional upper level course in philosophy, but it is recommended that philosophy majors take at least two of the following:

- PHIL 4113 Social and Political Philosophy
- PHIL 4133 Contemporary Ethical Philosophy
- PHIL 4143 Philosophy of Law
- PHIL 4203 Theory of Knowledge
- PHIL 4213 Philosophy of Science
- PHIL 4303 Philosophy of Religion
- PHIL 4403 Philosophy of Art
- PHIL 4423 Philosophy of Mind
- PHIL 4603 Metaphysics

History of Philosophy Group 2 (does NOT include Ancient Greek Philosophy and Modern Philosophy which are both required):

- PHIL 4013 Platonism and Origin of Christian Theology
- PHIL 4023 Medieval Philosophy
- PHIL 4043 Nineteenth Century Continental Philosophy
- PHIL 4063 Twentieth Century Continental Philosophy
- PHIL 4073 History of Analytic Philosophy
- PHIL 4123 Classical Ethical Theory

Requirements for a Minor in Philosophy: 18 semester hours in philosophy to include PHIL 2203 or PHIL 4253, and either PHIL 4003 or PHIL 4033. A student may earn either a minor or a combined major in philosophy but not both. A student must notify the department of his or her intent to minor.

For requirements for advanced degrees in philosophy, see the Graduate School Catalog.

See Page 394 for Philosophy (PHIL) courses

**PHYSICS (PHYS)**

Julio Gea-Banacloche
Chair of the Department
226 Physics Building
479-575-2506
http://www.uark.edu/depts/physics/
physics@uark.edu

**FACULTY**
- Distinguished Professors Salamo, Xiao
- Professors Bellaiche, Gea-Banacloche, Harter, Lacy, Pederson, Singh, Stewart (G.), Thibado, Vyas
- Research Professor Vickers
- Professors Emerich Chan, Gupta, Hobson, Hughes, Lieber, Richardson, Zinke
- Associate Professors Fu, Li, Oliver, Tchakhalian
- Assistant Professors Barraza-Lopez, Guo, Kennefick (D), Kennefick (J.), Rawwagah, Shew Stewart (J.)
- Instructors Skinner, Snyder

**Requirement for B.S. Degree with a Major in Physics:** In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under Fulbright College Academic Regulations and Degree Completion Program Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

The student must present a minimum of 40 semester hours in physics including PHYS 2054, PHYS 2074, PHYS 2094, PHYS 3414, PHYS 3614, PHYS 4073, PHYS 4991 and courses in one of six concentrations:

- **Astronomy:** PHYS 3544 plus 6 semester hours of ASTR courses numbered 3000 or above (3033, 4013, 4073).
- **Biophysics:** PHYS 3113 and 13 semester hours including courses numbered 3000 and above in physics, astronomy, biology, and chemistry chosen with the adviser’s permission.
- **Computational:** PHYS 3113 and 13 semester hours including courses numbered 3000 and above in physics, astronomy, advanced computer science, or
mathematics chosen with the adviser's permission.

Electronics: PHYS 3213, PHYS 4333, and 6 semester hours numbered 3000 and above in physics or astronomy.

Optics: PHYS 3544, any 1 course selected from PHYS 4734 or PHYS 4774, and 8 semester hours numbered 3000 and above in physics or astronomy.

Professional: PHYS 3113, PHYS 4333, and 10 semester hours numbered 3000 and above in physics or astronomy:

For all six of the possible concentrations the following mathematics courses are required: MATH 2554, MATH 2564, MATH 2574, and MATH 3423. CSCE 3513, CSCE 4423, or MEEG 2703 can be substituted for MATH 3423 with the adviser's approval. In addition, CHEM 1103/1101L and CHEM 1123/1121L, or an approved 8 hours of laboratory-based courses in CSCE 2004 and CSCE 2014 are required.

Majors must propose participation in a research experience project no later than the end of their junior year of study. A written report of the results must be submitted during Senior Seminar (PHYS 4991).

### Physics B.S.

#### Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program as well as page 130 of this chapter for College requirements.

Physics offers six concentrations: astronomy, biophysics, computational, electronics, optics and professional. The eight-semester plan for each is listed below.

- Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area. Well prepared students may skip BIOL 1543/1541L, and go immediately into the biology core courses. Students should consult their advisers.

#### Physics B.S. with Astronomy Concentration

**Fall Semester Year 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 ♠MATH 2554 Calculus I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 University/state core US History requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 ♠PHYS 2054 University Physics I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>1 General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>15 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Spring Semester Year 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1023 Composition II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 ♠MATH 2564 Calculus II</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 University/state core fine arts or humanities requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2 General Electives</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>4 ♠PHYS 2074 University Physics II</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>16 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Fall Semester Year 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ♠PHYS 2094 University Physics III</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 CHEM 1103/1101L University Chemistry I and Lab</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 ♠MATH 2574 Calculus III</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 University/state core humanities or fine arts requirement (as needed)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1 General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>16 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Spring Semester Year 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ♠PHYS 3614 Modern Physics</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 University/state core social science requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 ♠MATH 2584 Differential Equations</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 CHEM 1123/1121L University Chemistry II and Lab</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>15 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Fall Semester Year 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ♠PHYS/ASTR Group A</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 ♠MATH 3423 Advanced Applied Math I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 ♠PHYS/ASTR Group A or General Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 PHYS 3213 Electronics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>14 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Spring Semester Year 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ♠PHYS 3414 Electromagnetic Theory</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 University/state core social science requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 General Elective or ♠PHYS/ASTR Group A (as needed)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 General Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Fall Semester Year 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ♠PHYS 4073 Introduction to Quantum Mechanics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 ♠BIOL 4003 Laboratory Techniques in Microbiology</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>6 General Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>16 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Spring Semester Year 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ♠BIOL 3323 General Genetics</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

---

### Physics B.S. with Biophysics Concentration

**Fall Semester Year 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 BIOL 1543/1541L Principles of Biology</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 ♠MATH 2554 Calculus I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 ♠PHYS 2054 University Physics I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>15 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Spring Semester Year 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1023 Composition II</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 ♠MATH 2564 Calculus II</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 BIOL 2533 Cell Biology*</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 ♠PHYS 2074 University Physics II</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 University/state core fine arts or humanities</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>17 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Fall Semester Year 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ♠PHYS 2094 University Physics III</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 ♠MATH 2574 Calculus III</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 CHEM 1103/1101L University Chemistry I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 University/state core humanities or fine arts requirement (as needed)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>15 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Spring Semester Year 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ♠PHYS 3614 Modern Physics</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 CHEM 1123/1121L University Chemistry II</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 ♠MATH 2584 Differential Equations</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 ♠BIOL 2013/2011L General Microbiology*</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>16 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Fall Semester Year 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ♠ PHYS 3113 Analytical Mechanics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 ♠MATH 3423 Advanced Applied Math I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 University/state core social science requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4 ♠CHEM 3603/3601L Organic Chemistry I</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>1 General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>14 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Spring Semester Year 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ♠ PHYS 3414 Electromagnetic Theory</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>4 ♠CHEM 3613/3611L Organic Chemistry II</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3 University/state core US History requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 University/state core social science requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>17 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Fall Semester Year 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ♠PHYS 4073 Introduction to Quantum Mechanics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3 ♠BIOL 4003 Laboratory Techniques in Microbiology*</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>6 General Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>15 Semester Hours</strong></td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

**Spring Semester Year 4**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ♠BIOL 3323 General Genetics</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
## Physics B.S. with Computational Concentration

### Fall Semester Year 1
- 3 ENGL 1013 Composition I
- 3 MATH 2554 Calculus I
- 3 University/state core fine arts or humanities requirement
- 3 University/state core US History requirement or General Elective
- 4 PHYS 2074 University Physics II

17 Total Hours

### Spring Semester Year 1
- 3 ENGL 1023 Composition II
- 4 MATH 2574 Calculus II
- 3 University/state core humanities or fine arts requirement (as needed)
- 3 University/state core US History requirement or General Elective
- 4 PHYS 2074 University Physics II

15 Total Hours

### Fall Semester Year 2
- 4 PHYS 2094 University Physics III
- 4 MATH 2584 Differential Equations
- 3 General Elective or University/state core US History requirement (as needed)
- 4 CSCE 2004 Programming Foundations I

16 Total Hours

### Spring Semester Year 2
- 4 PHYS 3614 Modern Physics
- 4 MATH 2584 Differential Equations
- 4 CSCE 2004 Programming Foundations II

15 Total Hours

### Fall Semester Year 3
- 3 PHYS 3113 Analytical Mechanics
- 3 MATH 3423 Advanced Applied Math
- 3 Advanced Level Elective
- 3 University/state core social science requirement
- 3 General Electives

15 Total Hours

### Spring Semester Year 3
- 4 PHYS 3414 Electromagnetic Theory
- 3 CSCE 3143 Data Structures (recommended) or PHYS/ASTR Group A or advanced level electives*
- 3 PHYS/ASTR Group A or advanced level electives*
- 3 University/state core social science requirement
- 3 General Elective

16 Total Hours

### Fall Semester Year 4
- 3 CSCE 3313 Algorithms or (recommended) PHYS/ASTR Group A or advanced level electives*
- 3 PHYS/ASTR Group A or advanced level electives*
- 4 PHYS 4073 Introduction to Quantum Mechanics
- 6 General Electives

16 Total Hours

### Spring Semester Year 4
- 4 PHYS/ASTR Group A or 31000+ level Fulbright College elective (if needed) or advanced level electives*
- 4 PHYS 4991 Senior Seminar
- 3 Advanced Elective

16 Semester Hours

### Total Hours
- 16 Semester Hours
- 9 General Electives
- 1 PHYS 4991 Senior Seminar

124 Total Hours

* Nine hours of upper division computer science or mathematics courses can count toward the physics major.
† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Group A: Any PHYS or ASTR classes numbered 3000 or above.

---

## Physics B.S. with Electronics Concentration

### Fall Semester Year 1
- 3 ENGL 1013 Composition I
- 3 MATH 2554 Calculus I
- 3 University/state core social science requirement
- 3 PHYS 2054 University Physics I
- 1 General Elective

15 Total Hours

### Spring Semester Year 1
- 3 ENGL 1023 Composition II
- 4 MATH 2574 Calculus II
- 3 University/state core social science requirement
- 4 PHYS 2074 University Physics II
- 1 General Elective

15 Total Hours

### Fall Semester Year 2
- 4 PHYS 2094 University Physics III
- 4 MATH 2584 Differential Equations
- 3 General Elective or University/state core US History requirement (as needed)
- 3 PHYS/ASTR Group A or General Elective

15 Total Hours

### Spring Semester Year 2
- 4 PHYS 3614 Modern Physics
- 3 MATH 3423 Advanced Applied Math
- 3 PHYS 3614 Modern Physics
- 3 CHEM 3113/3111L University Chemistry I and Lab
- 1 General Elective

16 Total Hours

### Fall Semester Year 3
- 3 MATH 3423 Advanced Applied Math I
- 3 University/state core social science requirement
- 3 University/state core humanities or fine arts requirement (as needed)
- 6 General Electives

15 Total Hours

### Spring Semester Year 3
- 4 PHYS 3414 Electromagnetic Theory
- 3 PHYS 4333 Thermal Physics
- 3 University/state core social science requirement
- 3 General Elective
- 3 General Elective or PHYS/ASTR Group A

16 Total Hours

### Fall Semester Year 4
- 3 PHYS 4073 Introduction to Quantum Mechanics
- 3 PHYS/ASTR Group A
- 3 PHYS/ASTR Group A or General Elective (as needed)
- 6 General Electives

15 Total Hours

### Spring Semester Year 4
- 3 PHYS 4713 Introduction to Solid State Physics
- 3 PHYS/ASTR Group A (as needed) or General Elective
- 1 PHYS 4991 Senior Seminar
- 9 General Electives

16 Semester Hours

124 Total Hours

* Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.
### Physics B.S. with Optics Concentration

#### Fall Semester Year 1
- 3 ENGL 1013 Composition I
- 4 MATH 2554 Calculus I
- 3 University/state core US History requirement
- 4 PHYS 2054 University Physics I
- 1 General Elective
- 15 Semester Hours

#### Spring Semester Year 1
- 3 ENGL 1023 Composition II
- 4 MATH 2564 Calculus II
- 3 University/state core fine arts or humanities requirement
- 4 PHYS 2074 University Physics II
- 2 General Electives
- 16 Semester Hours

#### Fall Semester Year 2
- 4 PHYS 2094 University Physics III
- 3 CHEM 1103/1101L University Chemistry I and Lab
- 4 MATH 2574 Calculus III
- 3 University/state core humanities or fine arts requirement (as needed)
- 1 General Elective
- 16 Semester Hours

#### Spring Semester Year 2
- 4 PHYS 3614 Modern Physics
- 3 PHYS 3123 Electronics
- 4 MATH 2584 Differential Equations
- 4 CHEM 1123/1121L University Chemistry II and Lab
- 15 Semester Hours

#### Fall Semester Year 3
- 4 PHYS/ASTR Group A
- 3 MATH 3423 Advanced Applied Math I
- 4 PHYS/ASTR Group A or General Elective
- 3 University/state core social science requirement
- 14 Semester Hours

#### Spring Semester Year 3
- 4 PHYS 3414 Electromagnetic Theory
- 3 University/state core social science requirement
- 3 University/state core fine arts or humanities requirement
- 6 General Electives
- 16 Total Hours

#### Fall Semester Year 4
- 3 PHYS 4073 Introduction to Quantum Mechanics
- 3 PHYS/ASTR Group A
- 1 PHYS 4621L Modern Physics Lab
- 9 General Elective
- 16 Total Hours

#### Spring Semester Year 4
- 3 PHYS/ASTR Group A
- 3 PHYS/ASTR Group A (as needed) or General Electives
- 1 PHYS 4991 Senior Seminar
- 9 General Electives (to total 124 hours)
- 16 Semester Hours
- 124 Total Hours

**Requirements for a B.A. Degree with a Major in Physics:** This track is for students desiring a broader program in the arts, sciences, and social sciences while majoring in physics. This program is recommended for pre-medical, journalism, pre-business, pre-law and other students planning careers in fields for which a physics education would be beneficial. For B.A. students seeking teaching licensure, see the Teacher Licensure Requirements below. This program requires a total of 124 semester hours. The student must present 24 semester hours in physics or astronomy, including PHYS 2013/201L, PHYS 2033/2031L, PHYS 3603/3601L, PHYS 4991, and 11 semester hours chosen from any physics or astronomy courses at the 3000 level or above. The student must also present MATH 1284C (or MATH 1203 and MATH 1204) and 12 additional semester hours in social science, fine arts, humanities, or social science requirements.

**Group A:** Any PHYS or ASTR classes numbered 3000 or above.

---

### Physics B.S. with Professional Concentration

#### Fall Semester Year 1
- 3 ENGL 1013 Composition I

---

‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Group A: Any PHYS or ASTR classes numbered 3000 or above.

---

‡‡ Phys/ASTR Group A. Any PHYS or ASTR courses numbered 3000 or above.

---

† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

†† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.
Physics B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program as well as page 130 of this chapter for College requirements. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

The Physics B.A. program includes requirements for a special emphasis area. In this case, journalism was used as an example. Courses in Boldface indicate courses recommended by the Department of Journalism as the journalism foundation needed for science reporting. It is recommended that the free electives be chosen in a second science, or in journalism.

Fall Semester Year 1

3 ENGL 1013 Composition I
3 JOUR 1023 Media and Society* (required for journalism sequence) or General Elective
3-4 MATH 1203 (if required) or MATH 1284C
3 University/state core fine arts or humanities or US History requirement
3 University/state core fine arts or humanities
15-16 Semester Hours

Spring Semester Year 1

3 ENGL 1023 Composition II
3 JOUR 1033 Fundamentals of Journalism* (required for journalism sequence) or General Elective
3-4 MATH 1213 (as required) or MATH 2554 or MATH 2043
3 University/state core humanities or US History or fine arts requirement
3 University/state core social science requirement
15-16 Semester Hours

Fall Semester Year 2

4 PHYS 2013/2011L College Physics I
3 University/state core U.S. History or fine arts or humanities requirement
3 University/state core social science requirement
3-4 MATH 2554 or MATH 2043 (as required) or MATH/STAT Elective
3 JOUR 2013 News Reporting I* (pre-req. JOUR 1023 and 1033) or General Elective
16-17 Semester Hours

Spring Semester Year 2

4 PHYS 2033/2031L College Physics II
3 PHYS 3023 News Reporting II* or other Special Emphasis Area**
3 MATH or STAT elective
6 General Electives
16 Semester Hours

Fall Semester Year 3

3 PHYS 3603 Introduction to Modern Physics
3 MATH/STAT elective (as required) or General Elective
3 JOUR 3033 Media Law* or other Special Emphasis Area**
6 General Electives
15 Semester Hours

Spring Semester Year 3

1 PHYS 3601L Modern Physics Lab
1 PHYS/ASTR Group A
1 PHYS/ASTR Group A
1 JOUR 3013 Editing* or other Special Emphasis Area**
3 PHYS 300+ Advanced Level Elective
6 General Electives
16 Semester Hours

Fall Semester Year 4

2-4 PHYS/ASTR Group A
3-4 PHYS/ASTR Group A
3 Fulbright College 3000+ Elective (as needed)
6 Advanced level elective
14-17 Semester Hours

Writing Requirement: Students majoring in physics may satisfy the Fulbright College writing requirement by means of a senior thesis (PHYS 498V), an honors thesis submitted in fulfillment of the requirements of the honors program (PHYS 399VH), or by means of a paper submitted as part of PHYS 4991 or any physics or astronomy course numbered 3000 or above. Students electing the last route must obtain approval of the instructor during the first three weeks of the semester. The research/analytical paper should demonstrate competency in the use of word processing software and also at least one computer analytical tool such as a spreadsheet, mathematical or graphics program, or an original program written by the student.

Assessment of Student Learning: In accordance with state, University, and college requirements, all students must have learning assessed before graduation. Students majoring in physics will be assessed in the course PHYS 4991, which must be taken in the year prior to graduation.

Requirements for Departmental Honors in Physics: The Departmental Honors Program in Physics provides upper-division undergraduate students with an opportunity to formally participate in scholarly physics activities. Honors candidates carry out independent study and research under the guidance of the physics faculty and participate in special honors classes, seminars, and colloquia. Outstanding student achievement will be recognized by awarding the distinction “Physics Scholar Cum Laude” at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate’s program of honors studies. To be considered as a candidate for higher distinctions, however, a student must achieve at least a 3.50 cumulative grade-point average in physics and mathematics. In addition to satisfying the general college requirements for the bachelor’s degree with honors, an honors candidate in physics must
1. become a candidate no later than the first semester of the junior year of study,
2. enroll in honors sections of physics courses when available,
3. enroll in six hours of honors research PHYS 399VH,
4. enroll in at least one physics honors colloquium PHYS 3923H,
5. complete and orally defend an honors thesis based upon the project carried out in PHYS 399VH, and
6. achieve a cumulative grade-point average of 3.125 in physics.

Requirements for a Minor in Physics: Students wishing to obtain a minor in physics must take either PHYS 2033/2031L, PHYS 2033/2031L or PHYS 2054/2050L, PHYS 2074/2070L, plus at least seven additional hours of physics courses numbered 3000 or above. A student must notify the department of his or her intent to minor.

Physics (B.A. or B.S.) Physical/Earth Science Teacher Licensure Requirements:

Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

Students wanting to teach science in middle school should consult with a middle level adviser in the College of Education and Health Professions.

For information on advanced degrees in physics, see the Graduate School Catalog.
Requirements for B.A. Degree with a Major in Political Science: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under Fulbright College Academic Regulations and Degree Completion Program Policy), the following course requirements must be met:

30 semester hours of PLSC courses, at least 21 of which must be above 3000.
1. Students are required to take both PLSC 2003 American National Government and PLSC 2013 Introduction to Comparative Politics.
2. Students must choose one of the following:
   PLSC 2813 Introduction to International Relations
   PLSC 3103 Introduction to Public Administration
3. Students fulfill the remaining requirements from among any of the available political science courses.
   At least 21 hours must be 3000-4000 level courses. No more than 9 hours may come from PLSC 300V, 394V, 498V, or 499VH.

Additional Course Requirements (3-12 hours): Students must satisfy either Requirement A or Requirement B.

Requirement A: Students must demonstrate proficiency in a single modern or classical language other than English by completion of a world language course numbered 2013 (Intermediate II). This is usually accomplished through completion of a sequence of four language courses: 1003, 1013, 2003 and 2013. (Note: 1003 usually will not count toward the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)

Students may seek credit for any omitted courses in the language sequence (based on placement at a higher level), by passing an advanced language course with a grade of “C” or above. Such credit will be awarded at the request of the student by filing application to the World Languages, Literatures, and Cultures (WLLC) Department. Students with advanced knowledge of a language may also contact the WLLC Department regarding credit by exam.

Students pursuing this track must complete an approved university/state core humanities course in addition to the world language 2003 Intermediate I course, if credit for 2003 is earned.

Requirement B: Students must complete these three requirements: (1) PHIL 2003 or 2203; (2) STAT 2303 or WCOB 1033; and (3) MATH 2033, 2043, 2053, 2183, or 2554. Students pursuing this track must complete an approved university/state core humanities course in addition to either the PHIL 2003 or PHIL 2203 course used to satisfy this requirement.

Writing Requirement: The college writing requirement is fulfilled by submitting an acceptable research/analytical paper to the department for approval at least four weeks prior to graduation. The paper may be derived from completion of an honors essay (PLSC 499VH), a senior thesis (PLSC 498V), or some other advanced course in political science. The student is urged to consult with his or her faculty advisor no later than early in the first semester of the senior year.
Political Science (B.A.) Social Studies Teaching Licensure Requirements:

Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

Students wanting to teach social studies in middle school should consult with a middle level adviser in the College of Education and Health Professions.

Combined Majors

Political Science and African and African American Studies: For the requirements for a combined major in political science and African and African American studies, see page 135.

Political Science and Journalism: The combined major in political science and journalism is recommended for those students who have a strong interest in the reporting of public affairs as a career. For requirements, please refer to the combined major in Journalism and Political Science on page 172. Students should consult with their adviser in each department.

Political Science and Latin American and Latino Studies: For the requirements for a combined major in political science and Latin American studies, see page 174.

Requirements for a Minor in Political Science: 18 hours including PLSC 2003 or PLSC 2013. At least 9 of these hours must be in courses numbered 3000 or above, and courses must be chosen from at least two of the five political science fields. Students should consult with an adviser in the department for the selection of appropriate courses.

Minor in Legal Studies: This minor will introduce undergraduate students to the study and application of law by taking law-related courses in a number of disciplines. It provides a focus for students who are interested in the law, whose careers will require a measure of legal knowledge, or for those considering entering law school.

Requirements for a Minor in Legal Studies: 15 semester hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 3503</td>
<td>BLAW 3033</td>
<td>3</td>
</tr>
<tr>
<td>COMM 4113</td>
<td>FDSC 3202</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 4143</td>
<td>PLSC 3243</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 4253</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Students should consult with their advisers each semester.

For requirements for the M.A. degree in political science, the M.P.A degree, or the dual J.D./M.A. and J.D./M.P.A. degrees, see the Graduate School Catalog.

See Page 396 for Political Science (PLSC) courses and Page 392 for Public Administration (PADM) courses.

PSYCHOLOGY (PSYC)

Denise R. Beike
Chair of the Department
216 Memorial Hall
479-575-4256
http://psyc.uark.edu
psycapp@uark.edu

FACULTY

• University Professor Emeritus Dana
• Professors Behrend, Beike, Cavell, Lampinen, Lohr, Schroeder
• Professors Emeriti Knowles, Marr, Schultd, Stripling, Trapp, Witte
• Associate Professors Feldner, Freund, Ham, Levine, Petretic, Williams
• Associate Professors Emeriti Bonge, Westendorf
• Assistant Professors Bridges, Eidelman, Leen-Feldner, Parks, Veilleux
• Adjunct Professors Judges, Margulis
• Adjunct Assistant Professors Bosc, Cline, Harbin, Irwin, Revelle, Scott
• Clinical Assistant Professor Perry
• Visiting Assistant Professor Zies
• Instructors Alwood, Ditzfeld, Holm
• Clinical Assistant Professor Alwood

Requirements for B.A. Degree with a Major in Psychology: Students must complete 124 credit hours to include the minimum University/state core requirements (see page 41), the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under Fulbright College Academic Regulations and Degree Completion Program Policy), and following course requirements for the major. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

A minimum of 42 semester hours, including:

3-6 – 2003 Intermediate I of any world language. (This is usually accomplished through completion of a sequence of two language courses: 1013 and 2003. NOTE: 1003 usually will not count toward the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)

3 – PHIL 2003 or PHIL 2013
3-4 – MATH 2043, 2053 or 2554 with a grade of “C” or better
33 semester hours in psychology to include: PSYC 2003, PSYC 2013, and PSYC 3073; six hours chosen from PSYC 3013, PSYC 3023, PSYC 3093, PSYC 4053, or PSYC 4063; six hours chosen from PSYC 3103, PSYC 4073, PSYC 4123, PSYC 4143, PSYC 4183, PSYC 4193, three hours chosen from PSYC 328V or PSYC 4283; the remaining nine hours are electives and may be chosen from any psychology course in this catalog, with no more than a total of six hours in 206V, 207V and 399V combined. A grade of “C” or better is required in all psychology courses used to satisfy the 33 hours of psychology courses. In addition, a 2.00 cumulative grade-point average is required on all work completed in the Department of Psychology.

Students who want to pursue graduate training in psychology are advised to begin preparations early in their undergraduate careers. Grade-point average, scores on the Graduate Record Examinations, effective communications skills, preparation in the natural sciences and mathematics, and research experience (e.g., honors project, directed readings, laboratory experience) are the major criteria considered by admissions committees. To gain this research experience students are strongly encouraged to take the advanced research course, PSYC 328V.

Students with applied, paraprofessional, or human-service interests who plan to enter the job market with a B.A. in psychology are strongly encouraged to take
relevant courses in other areas of interest, including but not limited to, anthropology, sociology, social work, human development and family studies, education, and business administration.

Students interested in business applications of psychology (e.g., marketing, management) are similarly encouraged to take related courses in the Sam M. Walton College of Business; minors are also available in several areas of business. For more information concerning psychology as a major or careers in psychology and related fields, please contact the Psychology Advising Coordinator, Memorial Hall, room 203.

Writing Requirement: Students majoring in psychology will satisfy the Fulbright College writing requirement by successful completion (a grade of at least a “C”) in either PSYC 328V or PSYC 4283, each of which requires a final research paper written in American Psychological Association style.

Requirements for Graduation with Honors in Psychology: Both the four-year and the Departmental Honors Program in Psychology provide undergraduate students with an opportunity to formally participate in scholarly psychology activities. Honors candidates carry out independent study and research under the guidance of the psychology faculty and participate in special honors classes, seminars, and colloquia. In addition to satisfying the general college honors requirements, honors candidates in psychology are required to complete and orally defend an honors thesis based upon the independent study carried out in PSYC 399VH. In order to successfully complete the required thesis, students should choose an honors adviser as early as possible. An adviser should be selected, and an Honors Agreement completed, no later than the first semester in a student’s junior year. Students must register for, and complete, a minimum of 6 hours of PSYC 399VH. PSYC 399VH may be taken for 1 to 6 hours of credit each semester and repeated for a maximum of 12 hours. Nine hours are ordinarily needed to complete the research project and to prepare the honors thesis.

Honors candidates in psychology are encouraged to enroll in as many honors classes, seminars, and colloquia as possible, or as required by the honors program in which they are enrolled. Students graduating with honors typically graduate cum laude. Higher degree distinctions (magna cum laude, summa cum laude) are awarded by the Honors Council, recommended only in truly exceptional cases, and are based upon the whole of the candidate’s program of honors studies.

Psychology B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university core requirements of the program. Courses in psychology groups A, B and Capstone courses are listed after the program plan.

Fall Semester Year 1

3 †ENGL 1013 Composition I
3 †MATH 1203 (if required) or †MATH 2043, 2053, 2183 or 2554
3 PSYC 2003 General Psychology or University/state core social science course
3 1013 Elementary II world language course (or higher level depending on placement)
3 General Elective
15 Semester Hours

Spring Semester Year 1

3 †ENGL 1023 Composition II
3 †MATH 2043, 2053 or 2554 (if still needed) or General Elective
3 †PSYC 2013 Introduction to Statistics for Psychologists or PSYC 2003 (if not taken earlier)
4 Science University/state core lecture with corequisite lab requirement
3 2003 Intermediate I world language course (as needed)
16-17 Semester Hours

Fall Semester Year 2

3 †PSYC course from Group A
3 †PSYC 3073 Research Methods or †PSYC 2013 (if not taken earlier)
3 PHIIL 2003 or 2013
3 University/state core fine arts or US History requirement
3 University/state core social science requirement
15 Semester Hours

Spring Semester Year 2

3 †Advanced Level Elective
3 †PSYC 3073 Research Methods (if still needed) or University/state core social science requirement

Requirements for a Minor in Psychology: Minimum of 18 hours including PSYC 2003, PSYC 2013, and PSYC 3073. A maximum of three hours of PSYC 206V and/or PSYC 207V can be counted toward meeting the minor requirement. A grade of “C” or better is required in all psychology courses used to satisfy the 18 hours of the minor. In addition, a 2.00 cumulative grade-point average is required on all work completed in the Department of Psychology. A student must notify the department of his or her intent to minor.

Psychology (B.A.) Teacher Licensure in Social Studies Requirements:

Please refer to the Secondary Education Requirements for Fulbright College Students on page 125. Students wanting to teach social studies in middle school should consult with a middle level adviser in the College of Education and Health Professions.

For requirements for advanced degrees in psychology, see the Graduate School Catalog.

See Page 399 for Psychology (PSYC) courses
**RELIGIOUS STUDIES (RLST)**

JoAnn D’Alisera  
Director of Religious Studies  
334 Old Main  
479-575-4460  
http://rlst.uark.edu

**FACULTY**  
- Professors Coon (history), Finlay (history), Gordon (history), Jacobs (art history), Levine (classics), Markham (history), Sabo (anthropology), Spellman (philosophy), Swedenburg (anthropology), Wolpert (history)  
- Associate Professors Adler (philosophy), D’Alisera (anthropology), Erickson (anthropology), Ghadbian (political science), Kahl (comparative literature), Schweiger (history), Senor (philosophy), Sexton (architecture), Worden (sociology)  
- Assistant Professors Antov (history), Cai (history), White (history)

**Minor Program Requirements:** Students must complete 15 upper level (3000-4000) credit hours selected from the areas of emphasis listed below. Students must take at least one course in each area. A maximum of six credit hours from the student’s major may be applied toward the minor. Students may petition the Director of Religious Studies to count lower level courses and courses not listed on the Religious Studies course list toward the minor.

**Areas of Emphasis:**  
- **History**  
  ARHS 4843 Medieval Art  
  HIST 3003 History of Christianity  
  HIST 3023 The Islamic West, 650-1600  
  HIST 3033 Islamic Civilization  
  HIST 3083 Women and Christianity  
  HIST 3513 History of China to 1644  
  HIST 4043 Late Antiquity and the Early Middle Ages  
  HIST 4053 Late Middle Ages  
  HIST 4073 Renaissance and Reformation, 1300-1600  
  HIST 4313 Islamic Theology and Philosophy  
  HIST 4333 Modern Islamic Thought  
  HIST 4353 Middle East, 600-1250  
  HIST 4493 Religion in America to 1860  
  HIST 4553 The Recluse in Early East Asia

- **Social Sciences**  
  ANTH 3123 The Anthropology of Religion  
  ANTH 3213 Indians of North America  
  ANTH 3263 Indians of Arkansas and the South  
  ANTH 4093 The Archeology of Death  
  ANTH 4513 African Religions: Gods, Witches, Ancestors  
  PLSC 4593 Islam and Politics  
  SOCI 3103 Religion and Society

- **Philosophy/Literature/Languages**  
  PHIL 3203 Philosophy and the Christian Faith  
  PHIL 4013 Platonism & Origin of Christian Theology  
  PHIL 4023 Medieval Philosophy  
  PHIL 4303 Philosophy of Religion

**Topics Courses/Seminars/Honors Colloquia:** Students may also choose “topics/seminar” classes or an Honors colloquium in any Department or Program approved by the director as having a religious studies focus.

**SOCIAL WORK, SCHOOL OF (SCWK)**

Yvette Murphy-Erby  
Director of the School of Social Work  
Glenda House  
Graduate Program Director  
Scott Burcham  
Undergraduate Program Director  
Sara Collie  
Field Education Director  
106 ASUP  
479-575-5039  
http://socialwork.uark.edu

**FACULTY**  
- Professors Schriver, Shobe  
- Professor Emeritus King  
- Associate Professors Christy, Murphy-Erby, Stauss  
- Assistant Professors Ferguson, Koh  
- Research Associate Professor Hurd  
- Clinical Associate Professor Greer, House  
- Clinical Assistant Professors Burcham, Collie

The social work program is fully accredited at the baccalaureate and master’s level by the Council on Social Work Education. The principal objective of the social work program is to prepare students for beginning generalist social work practice.

**Criteria for Admission to B.S.W. Program and Professional Social Work Core**

Although a student may declare social work as a major at any point, admission to the B.S.W. Program is required before a student is allowed to take the following courses that comprise the Professional Social Work Core:

- SCWK 4333 Social Work Practice I  
- SCWK 4343 Social Work Practice II  
- SCWK 4733 Social Work Practice III  
- SCWK 4434 Field Experience/Social Work Internship I  
- SCWK 4412 Field Seminar I  
- SCWK 4444 Field Experience/Social Work Internship II  
- SCWK 4422 Field Seminar II

Each student must meet the following minimum academic course requirements and complete the application process outlined below.

**Minimum Academic Course Requirements:**  
Cumulative GPA of 2.0.  
Completion of the following 9 courses, each with a grade of “C” or better.  
COMM 1313 Public Speaking  
ENGL 1013 English Composition I  
PLSC 2003 American National Government  
PSYC 2003 General Psychology  
SCWK 2133 Introduction to Social Work  
SCWK 3193 Human Diversity and Social Work  
SCWK 4093 Human Behavior and the Social Environment I  
SCWK 4153 Social Welfare Policy  
SOCI 2013 General Sociology  

Completion of BIOL 1543/1541L Principles of Biology and Lab or ANTH 1013/ANTH 1011L Biological Anthropology and Lab with a grade of “D” or better.  
Students must have at least a 2.5 GPA in the ten courses listed above.

**Application Process:** The application process must be completed by the announced application deadline prior to the semester in which the student will enroll in Social Work Practice I. The application packet includes the following materials:

**Application Form.** This form becomes the cover sheet for the application packet. Application forms are available from the online B.S.W. Student
Volunteer Experience Form. This form provides documentation of satisfactory completion of the volunteer experience assignment in Introduction to Social Work or equivalent and submission of a positive “Supervisor’s Reference Form” from the supervisor of the experience.

Personal Statement. This narrative statement should include: motivation for becoming a social worker; relevant work, volunteer or life experiences; strengths and limitations for effective social work practice; personal commitment and agreement to abide by the values and ethics of the social work profession; career goals and indication of fields of practice preference or areas where you would not feel comfortable working.

Ethical Principles/Guidelines for University of Arkansas Social Work Students. By signing this statement you are acknowledging that you have read, understand and agree to abide by and behave in accordance with the “Ethical Principles/Guidelines for Social Work Students.” This statement is contained in the admissions packet, and is available from the online B.S.W. Student Handbook (see appendices) or from the social work office. A copy of this signed statement will be included in your advising file.

Two reference letters. The letters of reference will assess the applicant’s academic qualification, motivation and potential for success in the professional social work core. (See Appendices for additional details).

Copy of current transcript documenting the minimum academic course requirements listed above.

The above materials are submitted to the B.S.W. Program Director and reviewed by the B.S.W. Admission Committee. If the Admissions Committee has any questions concerning the content of the materials, the student may be asked to interview with a faculty member to resolve any questions or to provide additional information.

Upon completion of the materials review and interview (if necessary), the student will be informed in writing by the B.S.W. Program Director of his or her admission status.

There are three possible admission decisions:

Unconditional admission: These students have demonstrated through their application materials (and interview, if required) that they have the motivation and potential for competent professional social work practice and that they agree to uphold and conduct themselves in accordance with the values and ethics of professional social work practice. In addition, these students have at least a 2.5 GPA in the pre-professional core courses and have an overall GPA of 2.0.

Conditional admission: These students may continue in the major for a given period of time (usually one to two semesters) during which certain conditions must be met. Students may be admitted conditionally with a lower GPA than 2.0 overall, but the student must attain a 2.0 overall GPA during the time period required by the University for being removed from academic probation. Conditional admission related to non-GPA issues may be granted if the student agrees in writing to correct the concern. Examples of non-GPA concerns for which corrective action may be required include writing skills, if the student agrees in writing to correct the concern. Examples of non-GPA concerns for which corrective action may be required include writing skills, assertiveness, stress management, or working with diverse populations.

Non-acceptance: A decision of non-acceptance will be made when the student is found to be unsuited for professional social work practice. There are two criteria for non-acceptance: 1) the lack of acceptable academic performance necessary to successfully complete the requirements of the social work program, and/or 2) the inability to demonstrate commitment to social work values and ethics as they are reflected in the “Ethical Principles and Guidelines for UA Social Work Students’’ document that is available on-line in the BSW Student Handbook and included with the forms for applying to the professional social work core (see Appendices). A decision of non-acceptance will result in the student’s inability to progress in the social work program. In the event of non-acceptance, assistance with a transfer to another major will be provided upon request.

Criteria for Retention and Continuation: In addition to the admission process, the BSW Program also has requirements for retention and continuation in the major.

Retention

Maintenance of an overall GPA of 2.0.

Continuation and Grading Policies. A grade of C or better must be earned in all social work courses. If a student receives a grade of D or F in one of the professional social work core courses, the course must be retaken with a grade of C or better prior to taking the course for which that course serves as a prerequisite.

1. Once matriculated into the B.S.W. program, B.S.W. students who earn a D or F will be allowed to repeat this course one time. Students can repeat up to two different social work courses.

2. A student may repeat a course from which they earned a W no more than one time.

3. Any professional social work core course in which the student receives a grade of I (Incomplete) must be satisfactorily completed (with a grade of C or better) prior to entering the course for which the course receiving the Incomplete is a prerequisite.

Criteria For Termination: Students will be terminated from the B.S.W. Program for the following reasons:

1. Failure to maintain minimum GPA requirements (2.0 cumulative overall, 2.5 for all social work courses).

2. Failure to earn a C or better in a professional social work core course after the second attempt.

3. Engaging in any activity or behavior which, according to University policy or regulations, would result in dismissal from the University community. Such activity or behavior includes, but is not limited to, sexual harassment, physical or sexual assault, and academic dishonesty. (See Undergraduate Studies Catalog, description of Academic Dishonesty and, Undergraduate Studies Catalog, Appendix C: Student Handbook for details).

Students may be terminated from the B.S.W. Program for the following reasons:

Engaging in any activity or behavior incompatible with the “Ethical Principles/ Guidelines for UA Social Work Students’’ (available online in the B.S.W. Student Handbook and with the materials for application to the professional social work core; see Appendices). Such violations will initiate a review by the School of Social Work Student, Standards and Support Committee and may result in termination by the School of Social Work Director or a decision that termination is contingent upon completion of a corrective action specified by the School of Social Work Director.

Requirements for a Major in Social Work: In addition to the university/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Policy), the following cognate and major course requirements must be met. Bolded courses from the list below may be applied to portions of the university/state minimum core requirements.

4 – BIOL 1543/1541L Principles of Biology or ANTH 1013/1011L. Introduction to Biological Anthropology and Lab
3 – COMM 1313 Public Speaking
3 – ENGL 2003 Advanced Composition or ENGL 2013 Essay Writing
6 – HIST 1113 and HIST 1123 World Civilization I and II
3 – PHIL 2003 Intro to Philosophy or 2013 Intro to Ethics
3 – PLSC 2003 American National Government
3 – PSYC 2003 General Psychology
3 – SOCI 2013 General Sociology
3 – Statistics course
6 – Six hours of 3000- or 4000-level courses from AAST, ANTH, COMM, GEOG, HESC, PLSC, PSYC, SOCI and courses applicable to gender studies as approved by the School of Social Work
6 – Six hours of a single world language at the 1013 Elementary II level or
higher. NOTE: 1003 Elementary I in the world language sequence usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.

And 45 semester hours of social work courses including:
SCWK 2133 Intro to Social Work
SCWK 3193 Human Diversity and Social Work
SCWK 4073 Social Work Research and Technology I
SCWK 4093 Human Behavior and the Social Environment I
SCWK 4103 Human Behavior and the Social Environment II
SCWK 4153 Social Welfare Policy
SCWK 4333 Social Work Practice I
SCWK 4343 Social Work Practice II
SCWK 4412 Field Seminar I
SCWK 4422 Field Seminar II
SCWK 4434 Social Work Internship I
SCWK 4444 Social Work Internship II
SCWK 4733 Social Work Practice III

Social Work electives – 6 hours

Students must adhere to requirements cited for each social work course. A grade of “C” or better must be earned in all core social work courses. If a student receives a grade of “D” in a core social work course, the course must be retaken with a grade of “C” or better prior to taking the course for which that course serves as a prerequisite.

Writing Requirements: Social work students complete the research/analytical writing requirement by submitting the research paper from SCWK 4073 or honors paper to the social work faculty for approval.

Requirements for Departmental Honors in Social Work: The Departmental Honors Program in Social Work is an upper-division course of study with an independent investigation on a topic in social work. Students work closely with an adviser of their choice to define the goals of an honors project and to develop it to completion. They must take 12 hours (which may include 6 hours of thesis) in Honors Studies. In developing the project, students are encouraged to take honors courses, participate in honors colloquia, and do extensive background reading. The honors thesis may entail a library research project, a social work intervention project to be conducted in the field, or a policy analysis project. A research study that requires original data collection and analysis is preferred. In any case, the honors work is a serious long-term undertaking that should have direct value in supplementing the student’s regular departmental academic program. Enrollment in SCWK 399VH takes place after the student has done background reading and has actually begun a project. Students normally enroll in this course for three hours of credit. The course may be repeated for an additional 3 hours of credit if the student’s project is an extensive one. Regardless of the type of project, it is presented in written form and defended at an oral examination before an Honors Council Committee. Projects of extraordinarily high quality may be designated High Honors by the Committee. Successful completion of the requirements will be recognized by the award of the distinction “Social Work Scholar Cum Laude” at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate’s program of honors studies.

Social Work B.S.W.
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1
3 ENGL 1013 Composition I
3 MATH 1203 (or higher level math)
3 PLSC 2003 or PSYC 2003 or SOCI 2013
3 University/state core fine arts course
3 1013 Elementary II world language course (or higher level, depending on placement)
15 Total Hours

Spring Semester Year 1
3 ENGL 1023 Composition II
4 BIOL 1543/1541L or ANTH 1013/1011L
3 PSYC 2003 or SOCI 2013 or PLSC 2003 (as needed)
3 COMM 1313 Public Speaking
3 2003 Intermediate I world language course (or higher level)
16 Total Hours

Fall Semester Year 2
3 SOCI 2013 or PLSC 2003 or PSYC 2003 (as needed)
3 SCWK 2133 Introduction to Social Work
3 ENGL 2003 or ENGL 2013 (as needed)
3 HIST 1113 World Civ I
3 University/state core social science requirement
15 Total Hours

Spring Semester Year 2
3 ▲SCWK 3193 Human Diversity
3-4 Statistics (SOCI, PSYC, STAT, etc) (4 Hours if SOCI)
3 HIST 1123 World Civilization II
16-17 Total Hours

Fall Semester Year 3
3 ▲SCWK 4093 Human Behavior and Social Environment I
3 ▲SCWK 4153 Social Welfare Policy
3 ▲SCWK Elective
3 PHIL 2003 or PHIL 2013
3 ▲Upper level social science*
15 Total Hours

Spring Semester Year 3
3 ▲SCWK 4073 Social Work Research and Technology
3 ▲SCWK 4333 Social Work Practice I
3 ▲SCWK 4103 Human Behavior and Social Environment II
3 ▲SCWK Elective
4 General Elective
15 Total Hours

Fall Semester Year 4
3 ▲SCWK 4773 Social Work Practice III
4 ▲SCWK 4434 Field Experience / Social Work Internship I
2 ▲SCWK 4412 Field Seminar I
3 General Electives
15 Total Hours

Spring Semester Year 4
4 ▲SCWK 4444 Field Experience / Social Work Internship II
2 ▲SCWK 4422 Field Seminar II
3 ▲Upper level social science*
7-9 General Electives (as needed to total 124 degree credit hours)
16-18 Semester Hours
124 Total Hours

* 3000-4000 level social science electives to be selected from Sociology, Psychology, Anthropology, Gender Studies, Political Science, Communications, Geosciences, African and African American Studies, or Human Environmental Sciences.
† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter.
‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

Requirements for a Minor in Social Work: 18 hours including SCWK 2133, SCWK 3193, and SCWK 4153 (required) and any other nine hours of social work electives. A student must notify the department of his or her intent to minor. The social work minor is not preparation for social work practice and is not recognized by CSWE.

SOCIETY AND CRIMINAL JUSTICE (SOCI)

Brent L. Smith
Chair of the Department
211 Old Main
479-575-3205
http://sociology.uark.edu

FACULTY
- Distinguished Professor Smith
- University Professors Morgan, Schwab
- University Professor Emeritus Ferritor
- Professors Fitzpatrick, Gaber (S.), Holyfield, Zajicek
- Professors Emeriti Mangold, Prassel, Rice
- Associate Professors Adams, Bradley, Engen, Koski, Worden, Yang
- Associate Professor Emeriti Patnoe, Sierger
- Assistant Professors Bustamante, Gruenewald, Harris, Morimoto
- Visiting Assistant Professors Nalley, Shields
- Instructors Newman, Thompson

Sociology (SOCI)

A Bachelor of Arts (B.A.) degree in sociology is useful preparation not only for graduate work in sociology, but also for pre-professional training in other fields, such as medicine, law, human services, or related work in the government.

Requirements for B.A. Degree with a Major in Sociology: In addition to the University/state core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under Fulbright College Academic Regulations and Degree Completion Policy), the following course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

3-4 – MATH 2033, 2043, 2053, 2183 or 2554
3 – ENGL 2003 (see course description for exemption requirements)
3 – Completion of a world language course at the 1013 Elementary II level or higher. NOTE: If a world language 1003 Elementary I course is taken prior to 1013, it usually does not count toward the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.
31 semester hours in SOCI courses, to include SOCI 2013, SOCI 3193, SOCI 3223, SOCI 3301L, SOCI 3303, SOCI 3313, SOCI 4023, SOCI 4043, and 9 hours from sociology 3000- and 4000-level electives.

Writing Requirement: To fulfill the Fulbright College writing requirement, each sociology major will submit, prior to graduation, a substantial research or analytical paper, with a grade of “A” or “B” from an upper-division sociology course (3000-, 4000-, or 5000-level) to their departmental adviser. Satisfactory completion of an honors project or a senior thesis may fulfill this requirement.

Requirements for Departmental Honors in Sociology: The Departmental Honors Program in Sociology is an upper-division course of study based on independent investigation on a scholarly topic of sociological interest. To be eligible for sociology honors candidacy, students normally will have completed 28 semester hours and not more than 85 semester hours with a minimum cumulative grade-point average of 3.5. They must take 12 hours in Honors Studies, which may include 6 hours of thesis. In the junior year, three hours of directed reading, planning, or other work on a research project should be selected from the following courses:

SOCI 399VH Honors Course
SOCI 403V Individual Study in Sociology
SOCI 4043 Seminar in Sociology

In the senior year, the student will complete an honors project for up to six hours of credit in SOCI 399VH Honors Course. This honors research project will normally consist of an empirical investigation but may, with the approval of the honors director and the other departmental representatives, be intensive library research on a topic. All candidates must pass an oral examination given by an Honors Council Committee. Successful completion of the requirements will be recognized by the award of the distinction “Sociology Scholar Cum Laude” at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate’s program of honors studies.

Sociology B.A.
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1
3 – ENGL 1013 Composition I
3-4 – MATH 1203 (if required) or MATH 2033, 2043, 2053, 2183 or 2554
3 – SOCI 2013 General Sociology or University/state core social science course
3 – SOCI 1013 Elementary II world language course (or higher level, depending on placement)
3 – University/state core fine arts, humanities or US history requirement
15-16 Total Hours

Spring Semester Year 1
3 – ENGL 1023 Composition II
3-4 – MATH 2043, 2053, 2183, 2554 or General Elective
3 – SOCI 2013 General Sociology (if still needed) or University/state core social science course
4 – Science University/state core lecture with corequisite lab requirement
3 – General Elective
16-17 Total Hours

Fall Semester Year 2
3 – ENGL 2003 Advanced Composition (as needed)
3 – University/state core social science requirement (as needed)
3 – University state core humanities, U.S. history or fine arts requirement (as needed)
6 – General Electives
15 Total Hours

Spring Semester Year 2
3 – 1-Advanced Level Elective
3 – 1-SOCI 3133 Social Research
4 – Science University/state core lecture with corequisite lab requirement
3 – University state core U.S. history, fine arts, or humanities requirement (as needed)
3 – General Elective
16 Total Hours

Fall Semester Year 3
3 – 1-SOCI 3193 Race, Class, & Gender
3 – 1-SOCI 3223 Social Psychology
10 – General Electives
16 Total Hours

Spring Semester Year 3
4 – 1-SOCI 3303 & 3301L Social Data Analysis and Lab
3 – 1-SOCI Upper Level Elective
3 – 1-Advanced Level Elective
6 – General Electives
16 Total Hours

Fall Semester Year 4
3 – 1-SOCI 4023 Social Theory
6 – 1-SOCI Upper Level Electives
6 – General Electives
15 Total Hours

Spring Semester Year 4
3 – 1-SOCI 4043 Seminar in Sociology
3 – 1-3000+ Advanced Level Elective (if needed) or 1-Advanced Level Elective
3 – 1-Advanced Level Elective
6 – General Electives
15 Semester Hours
124 Total Hours

‡ Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
‡‡ Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.
Requirements for a Minor in Sociology: 19 semester hours in sociology to include SOCI 2013, SOCI 3301L, SOCI 3303, SOCI 3313, and at least nine hours of 3000-level classes or above. A student must notify the department of her or his intent to minor.

Sociology (B.A.) Teacher Licensure in Social Studies Requirements:
Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

Students wanting to teach social studies in middle school should consult with a middle level adviser in the College of Education and Health Professions.

Combined Majors:
For a combined major in sociology and African and African American studies, see page 135.
For a major in criminal justice, see below.
For a major in social work, see page 194.
For requirements for an M.A. degree in sociology, see the Graduate School Catalog.

See Page 403 for Sociology (SOCI) courses
and Page 335 for Criminal Justice (CMJS) courses

Criminal Justice (CMJS)
Brent L. Smith
Chair of Studies
211 Old Main
479-575-3205
http://sociology.uark.edu

The program in criminal justice is designed to prepare candidates for a variety of entry-level positions in criminal justice and to enable experienced personnel to expand their knowledge and skills. Drawing on a strong interdisciplinary base in the social sciences, the program provides education in the complexities of human behavior and problems of interpersonal relations in an increasingly urbanized America. The overall goal of the program is to enable men and women to contribute to the development and implementation of a fair and effective system of criminal justice.

Requirements for the B.A. Degree with Major in Criminal Justice: Students must complete 124 degree credit hours to include the minimum University/state core requirements (see page 41), the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under Fulbright College Academic Regulations and Degree Completion Program Policy), and the following major course requirements. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

3–4 MATH 2033, 2043, 2053, 2183 or 2554
3 ENGL 2003 (see course description for exemption requirements)
3 3 hours of a world language at the 1013 Elementary II level or higher.
(World language courses taken are dependent on placement level in sequence. NOTE: 1003, if required, usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.)
And a minimum of 37 semester hours to include CMJS 2003, CMJS 2023, CMJS 2043, CMJS/SOCI 3023, SOCI/CMJS 3043, CMJS/SOCI 3203, SOCI 3001L, SOCI 3303, SOCI 3313, and 12 hours of 3000- and 4000-level criminal justice or sociology courses not taken above.
For transfer students, a minimum of 18 hours of coursework in the major at the University of Arkansas is required.

Writing Requirement: To fulfill the Fulbright College writing requirement, each criminal justice major will submit, prior to graduation, a substantial research or analytical paper, with a grade of "A" or "B" from an upper-division criminal justice course (3000-, 4000-, or 5000-level) to their departmental adviser. Satisfactory completion of an honors project or a senior thesis may fulfill this requirement.

Requirements for Departmental Honors in Criminal Justice: The Departmental Honors Program in Criminal Justice is an upper-division course of study based on a topic in the area of criminal justice. To be eligible for criminal justice honors candidacy, students normally will have completed 28 semester hours and not more than 85 semester hours with a minimum cumulative grade-point average of 3.5. They must take 12 hours (which may include 6 hours of thesis) in Honors Studies. The honors project may be an intensive study of a topic in criminal justice or an empirical research investigation. The candidate is expected to pass an oral examination given by an Honors Council Committee. Projects of extraordinarily high quality may be designated High Honors by the Committee. Successful completion of the requirements will be recognized by the award of the distinction "Criminal Justice Scholar Cum Laude" at graduation. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate's program of honors studies.

Criminal Justice B.A.
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1
3 ENGL 1013 Composition I
3–4 MATH 2033, 2043, 2053, 2183 or 2554
3 SOCI 2013 General Sociology or University/state core social science requirement
3 1013 Elementary II world language course (or higher level, depending on placement)
3 University/state core fine arts, humanities or US history requirement
15–16 Semester Hours

Spring Semester Year 1
3 ENGL 1023 Composition II
3–4 MATH 2033, 2043, 2053, 2183 or 2554 or General Elective
3 SOCI 2013 General Sociology (if still needed) or University/state core social science requirement
4 University/state core science requirement with corequisite lab
3 General Elective
16–17 Semester Hours

Fall Semester Year 2
3 ENGL 2003 Advanced Composition
3 University/state core social science requirement
3 University/state core humanities, U.S. history, or fine arts requirement (as needed)
3 CMJS 2003 Intro to CMJS
3 General Elective
15 Semester Hours

Spring Semester Year 2
3 †Advanced Level Elective
3 †CMJS 2023 Intro to Criminology
3 †CMJS 2043 Criminal Law and Society
3 University/state core U.S. history, fine arts, or humanities requirement (as needed)
4 Science University/state core requirement
16 Semester Hours

Fall Semester Year 3
4 †SOCI 3303/3303L Social Data and Analysis/Lab
3 †CMJS/SOCI 3023 Criminology
3 †CMJS/SOCI 3203 Corrections
3 †Advanced Level Elective
3 General Elective
16 Semester Hours

Spring Semester Year 3
3 †SOCI 3313 Social Research
3 †CMJS 3000-4000 elective
3 †CMJS 3043 The Police and Society
3 †Advanced Level Elective
4 General Electives
16 Semester Hours

Fall Semester Year 4
3 †CMJS/SOCI 3000-4000 elective
3 †3000-plus Advanced Level Elective (as needed) or †Advanced Level Elective
9 General Electives
15 Semester Hours
Spring Semester Year 4

3 ††CMJS/SOCI 3000-4000 elective
3 ††CMJS/SOCI 3000-4000 elective
9 General Electives
15 Semester Hours
124 Total Hours

† Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
†† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

See Page 335 for Criminal Justice (CMJS) courses.

WORLD LANGUAGES, LITERATURES, AND CULTURES (WLLC)

Joan F. Turner
Chair of Department
425 Kimpel Hall
479-575-2951
http://www.uark.edu/depts/flaninfo/

FACULTY
• Professors Haydar (A.), Levine, Pritchett, Restrepo
• Associate Professors Arenberg, Bell, Christiansen, Comfort, Condray, Fredrick, Fukushima, Jones, Rozier, Ruiz, Turner, Villalobos
• Assistant Professors Billings, Hoyer, Puente
• Clinical Associate Professor Xu

The world languages requirement among the basic courses is satisfied based on each separate department’s undergraduate degree program. Students should consult their adviser to confirm the total number of courses needed to satisfy their departmental world language requirement. Students who, on the basis of prior knowledge of language, omit one or more courses in the basic language sequence (1013-2013) may receive college credit for omitted courses if they validate their higher placement by passing an advanced course with a grade of “C” or above. Credit will be awarded at the request of the student when filed by application to the World Languages, Literatures and Cultures Department office.

Restrictions: (a) Conversation courses (3033, 4033) and correspondence courses may not be used to validate such prior knowledge, (b) No degree credit (graduation credit) is awarded for a world language 1003 Elementary I course to students in Fulbright College continuing the language begun in high school, either by validation or regular registration. Also, for Fulbright College students who do not present the Fulbright College admission requirement of two units (years) of a single modern foreign or classical language, the first semester of language study will be considered remedial and will not count towards the 124 hours required for graduation (although the course will appear as University credit on the student’s record). Credit will be awarded at the request of the student when filed by application to the World Languages, Literatures and Cultures Department office.

French

Requirements for a Major in French: In addition to the state/university core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Program Policy), the following departmental and major course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

3 – COMM 1313 Public Speaking
3 – ENGL 2003 Advanced Composition (see catalog course description for exemption requirements) or ENGL 2013 Essay Writing
6 – Six hours of language-related courses to be fulfilled by completing six hours of a single world language different than the major, or six hours from any combination of department-approved WLLC courses (such as WLLC 2413, WLLC 3173, WLLC 4023, WLLC 4033), classical studies (CLST) courses, or language-related area/ethnic or gender studies courses.

6 – Humanities, 3 of which must come from either PHIL 2003 or WLLT 1113: the remaining 3 hours may be fulfilled by any other state/university humanities core course. (Honors students who complete the HUMN 1114, 1124, 2114, 2124 (H2P) sequence will have fulfilled the World Civilization HIST 1113 and 1123 requirement for this major as well as the major’s 6-hour Humanities requirement (equivalent of WLLT 1113 and 1123).) 6 – World Civilization (Social Sciences) to be fulfilled by HIST 1113 and 1123 (This fulfills 6 hours of social science university/state core; the remaining 3 hours in the social science core must be fulfilled by a non-HIST social science university/state core course. (Honors students who complete the HUMN 1114, 1124, 2114, 2124 (H2P) sequence will have fulfilled the World Civilization HIST 1113 and 1123 requirement for this major as well as the major’s 6-hour Humanities requirement (equivalent of WLLT 1113 and 1123).

24 hours in French in courses numbered 3000 or above with a minimum grade of “C” in each course. Specific courses required are FREN 3003 (FREN 1013, 2003; and 2013 or equivalent are prerequisites), FREN 3113, FREN 4003, FREN 4033, FREN 4213, and any two French literature courses at the 4000-level.

French B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. The following eight-semester plan refers to both University Core and additional departmental requirements as presented above. Hours may vary by individual, based on placement and previous credit granted. Once all core and departmental requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

Fall Semester Year 1

3 ENGL 1013 Composition I
3-4 MATH 1203 (If required) or 1MATH 2033, 2043, 2053, 2183 or 2554
3 1013 Elementary French I or 2003 Intermediate French I, depending on placement in sequence
3 U.S. History university/state core requirement
3 Fine Arts or non-HIST Social Science university/state core requirement
15-16 Semester Hours

Spring Semester Year 1

3 ENGL 1023 Composition II
3 COMM 1313 Public Speaking
3 2003 Intermediate I or 2013 Intermediate II, depending on placement in sequence
3 Fine Arts or non-HIST Social Science university/state core requirement
4 Science university/state core lecture with corequisite lab requirement
16 Semester Hours

Fall Semester Year 2

3 2013 Intermediate II or FREN 3003, depending on placement in sequence
3 PHIL 2003 or WLLT 1113
3 ENGL 2003 or 2013
4 Science university/state core lecture with corequisite lab requirement
3 General Elective
16 Semester Hours

Spring Semester Year 2

3 §FREN 3003 (If needed) or §FREN 3113
3 §Advanced Level Elective
3 HIST 1113
6 General Electives
15 Semester Hours

Fall Semester Year 3

3 §FREN 4003
3 §FREN 4000+ FREN literature course (if prereq FREN 3113 is met) or 3000+ FREN elective
3 Humanities from university/state core requirements (if FREN 2003 not taken) or General Elective
3 An additional world language or WLLC 2413, WLLC 3173, WLLC 4023 or an area studies course (approved by adviser)
German B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. The following eight-semester plan refers to both University and major requirements as presented above. Core requirement hours may vary by individual, based on placement and previous credit granted. Once all core requirements are met, students may substitute a three-hour (or more) general elective in place of a core area.

German

Requirements for a Major in German: In addition to the state/university core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Program Policy), the following departmental and major course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

- COMM 1313 Public Speaking
- ENGL 2003 Advanced Composition (see catalog course description for exemption requirements) or ENGL 2013 Essay Writing
- Six hours of language-related courses to be fulfilled by completing six hours of a single world language different than the major, or six hours from any combination of department-approved WLLC courses (such as WLLC 2413, WLLC 3173, WLLC 4023, WLLC 4033), classical studies (CLST) courses, or language-related area/ethnic or gender studies courses.

- Humanities, 3 of which must come from either PHIL 2003 or WLIT 1113; the remaining 3 hours may be fulfilled by any other state/university humanities core course.

- Honors students who complete the HUMN 1114, 1124, 2114, 2124 (H2P) sequence will have fulfilled the World Civilization HIST 1113 and 1123 requirement for this major as well as the major’s 6-hour Humanities requirement (equivalent of WLIT 1113 and 1123).

- World Civilization (Social Sciences) to be fulfilled by HIST 1113 and 1123

This fulfills 6 hours of social science university/state core; the remaining 3 hours in the social science core must be fulfilled by a non-HIST social science university/state core course.

- Honors students who complete the HUMN 1114, 1124, 2114, 2124 (H2P) sequence will have fulfilled the World Civilization HIST 1113 and 1123 requirement for this major as well as the major’s 6-hour Humanities requirement (equivalent of WLIT 1113 and 1123).

- 24 hours in German in courses numbered 3000 or above with a minimum grade of “C” in each course. Specific courses required are GERM 3003 (GERM 1003*, GERM 1013, 2003, and 2013 or equivalent or prerequisites), GERM 3013, GERM 4003, GERM 4213, and three hours of conversation (GERM 3033 or GERM 4033).

- NOTE: 1003 usually will not count towards the 124 hours required for degree credit; see College Admission Requirements on page 129 for further details.

- GERM 5000-level classes such as GERM 5223 (Early German Literature), GERM 5273 (Enlightenment through Classicism), and GERM 5363 (Literature after 1945) may be taken by undergraduates with exceptional language skills after approval by the undergraduate advisor and a petition to the graduate school.

Fall Semester Year 1

<table>
<thead>
<tr>
<th>3</th>
<th>ENGL 1013 Composition I</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4</td>
<td>MATH 1203 (if required) or MATH 2033, 2043, 2053, 2183 or 2554</td>
</tr>
<tr>
<td>3</td>
<td>GERM 1013 Elementary German II or higher-level GERM course, depending on placement in sequence</td>
</tr>
<tr>
<td>3</td>
<td>U.S. History university/state core requirement</td>
</tr>
<tr>
<td>3</td>
<td>Fine Arts or non-HIST Social Science state/university core requirement</td>
</tr>
<tr>
<td>15-16 Total Hours</td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester Year 1

| 3 | ENGL 2023 Composition II |
| 3 | COMM 1313 Public Speaking |
| 3 | 2003 Intermediate German I or higher-level GERM course, depending on placement in sequence |
| 3 | Fine Arts or non-HIST Social Science state/university core requirement (as needed) |
| 4 | Science university/state core lecture with corequisite lab requirement |
| 16 Total Hours |

Fall Semester Year 2

| 3 | GERM 2013 Intermediate II or 1GERM 3000+ course as needed in sequence |
| 3 | PHIL 2003 or WLIT 1113 |
| 3 | HIST 1113 |
| 4 | Science university/state core lecture with corequisite lab requirement |
| 3 | General Elective |
| 16 Total Hours |

Spring Semester Year 2

| 3 | 1Advanced Level Elective |
Spanish B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. The following eight-semester plan refers to both University Core and additional departmental requirements as presented above. Hours may vary by individual based on placement and previous credit granted. Once all core and departmental requirements are met, students may substitute a three-hour (or more) general elective in place of a core requirement.

Fall Semester Year 1

3   ENGL 1013 Composition I
3-4  MATH 1203 or any higher-level MATH approved for university/state core
3   SPAN 1013 Elementary Spanish II or higher-level SPAN course, depending on placement in sequence
3   U.S. History university/state core requirement
3   Non-HIST Social Science university/state core requirement
15-16 Total Hours

Spring Semester Year 1

3   ENGL 1023 Composition II
3   COMM 1313 Public Speaking
3   SPAN 2003 Intermediate Spanish I or higher-level SPAN course, depending on placement in sequence
3   PHIL 3003 or WLT 1113
4   Science university/state core lecture with corequisite lab requirement
16 Total Hours

Fall Semester Year 2

3   SPAN 2013 Intermediate Spanish II (as needed) or †SPAN 3003 (as needed) or higher-level SPAN course
3   HIST 1113
6   Science university/state core lecture with corequisite lab requirement
6   General Electives
16 Total Hours

Spring Semester Year 2

3   †SPAN 3103 (as needed) or higher-level SPAN course
3   †SPAN 3003 (as needed) or †Advanced Level Elective
3   HIST 1123
3   Humanities course from university/state core requirements (if SPAN 2003 not taken), or General Elective
3   General Elective
15 Total Hours

Fall Semester Year 3

3   †SPAN 3033 (as needed) or †higher-level SPAN class
3   †SPAN 3133 (as needed) or †higher-level SPAN class
3   Fine arts university/state core requirement
3   An additional world language or WLLC 2413, †WLLC 3173, †WLLC 4023 or an area studies course (approved by advisor)
4   General Electives
16 Total Hours

Requirements for an Additional Major in German for Non-Arts and Science Students: Students in colleges other than the Fulbright College of Arts and Sciences can complete an additional major in German by completing 24 hours in German: GERM 3003, 3013, 3033, 4003, 4213 and 9 hours of upper-level electives. As this is a combined major, students must also fulfill their home college's core and the degree requirements for the major in their college to be eligible.

Spanish

Requirements for a Major in Spanish: In addition to the state/university core requirements (see page 41) and the Fulbright College of Arts and Sciences Graduation Requirements (see page 134 under College Academic Regulations and Degree Completion Program Policy), the following departmental and major course requirements must be met. Bolded courses from the list below may be applied to portions of the University/state minimum core requirements.

3 – COMM 1313 Public Speaking
3 – ENGL 2003 Advanced Composition (see catalog course description for exemption requirements) or ENGL 2013 Essay Writing
6 – Six hours of language-related courses to be fulfilled by completing six hours of a single world language different than the major, or six hours from any combination of department-approved WLLC courses (such as WLLC 2413, WLLC 3173, WLLC 4023, WLLC 4033), classical studies (CLST) courses, or language-related area/ethnic or gender studies courses.
6 – Humanities, 3 of which must come from either PHIL 2003 or WLT 1113; the remaining 3 hours may be fulfilled by any other state/university humanities core course.

Honors students who complete the HUMN 1114, 1124, 2114, 2124 (H2P) sequence will have fulfilled the World Civilization HIST 1113 and 1123 requirement for this major as well as the major's 6-hour Humanities requirement (equivalent of WLIT 1113 and 1123).

6 – World Civilization (Social Sciences) to be fulfilled by HIST 1113 and 1123

(This fulfills 6 hours of social science university/state core; the remaining 3 hours in the social science core must be fulfilled by a non-HIST social science university/state core course.)

Honors students who complete the HUMN 1114, 1124, 2114, 2124 (H2P) sequence will have fulfilled the World Civilization HIST 1113 and 1123 requirement for this major as well as the major's 6-hour Humanities requirement (equivalent of WLIT 1113 and 1123).

27 hours in Spanish in courses numbered 3000 or above with a minimum grade of “C” in each course. Specific courses required are SPAN 3003 (SPAN 1013, 2013, and 2013 or equivalent may be required prior to taking SPAN 3003), SPAN 3033, SPAN 3103, SPAN 3113, and SPAN 4003. The remaining 12 hours are to be selected from among other 3000-4000-level offerings, in consultation with the major adviser. Students considering future graduate work in Spanish are strongly advised to take both the Spanish and Latin American literature surveys (SPAN 4103 or 4113 and 4133 or 4193).
### Spring Semester Year 3
- 3 **†**SPAN 4003
- 3 An additional world language or WLLC 2413, ††WLLC 3173, ††WLLC 4023 or an area studies course (approved by advisor)
- 3 ENGL 2003 or ENGL 2013
- 3 † Advanced Level Elective
- 4 General Electives
- **16 Total Hours**

### Fall Semester Year 4
- 3 ††SPAN 3000-4000 level elective
- 3 ††SPAN 3000-4000 level elective
- 3 † Advanced Level Elective
- 6 General Electives
- **15 Total Hours**

### Spring Semester Year 4
- 3 ††SPAN 3000-4000 level elective
- 3 ††SPAN 3000-4000 level elective
- 3 †3000+ Advanced Level Elective (as needed to meet residency requirement)
- 6 † Advanced Level Electives (as needed) or General Electives if 40-hour rule met
- **15 Semester Hours**
- **124 Total Hours**

- † Meets 40-hour advanced credit hour requirement. See College Academic Regulations on page 131 of this chapter
- †† Meets 24-hour rule (24 hours of 3000-4000 level courses in Fulbright College), in addition to meeting the 40-hour rule. See College Academic Regulations on page 131 of this chapter.

### Writing Requirement:
The college writing requirement may be satisfied by a term paper or other written work submitted for an upper-division world language literature class approved by the chair of the department.

For majors in Greek and Latin, see Classical Studies.

### Requirements for a Minor in World Languages:

**Arabic:** 15 hours in courses numbered 3000 or above. Specific courses required are ARAB 3016, ARAB 4016, and ARAB 4023 or ARAB 4053.

**French:** 15 hours in courses numbered 3000 or above. Specific courses required are FREN 3003, FREN 3113, FREN 4003, and FREN 4033. In some cases, specific course requirements may be adjusted to the individual needs of the candidate with the permission of the French adviser.

**German:** 15 hours in courses numbered 3000 or above. Specific courses required are GERM 3003, GERM 4003, GERM 4213 and three hours of literature.

**Spanish:** 15 hours in courses numbered 3000 or above. Specific courses required are SPAN 3003, SPAN 3103, and SPAN 4003 with six additional hours selected in consultation with the Spanish adviser.

### Requirements for a Minor in World Languages with a Business Orientation:

**Chinese:** Students in the Minor program in Chinese with a Business Orientation must complete 15 credit hours of upper-level Chinese courses. Required courses are CHIN 3003, CHIN 3033, CHIN 3103, and CHIN4333; in addition to these four courses, students must choose one of the following elective courses: CHIN 3983 or CHIN 4313. In some cases, elective courses may be adjusted to the individual needs of the candidate with the permission of the Chinese adviser.

**French:** Courses required are FREN 3003, FREN 3103, FREN 4003, FREN 4033, and FREN 4333.

**Spanish:** Courses required are SPAN 3003, SPAN 3033, SPAN 3103, SPAN 4003, and SPAN 4333. In some cases, specific course requirements may be adjusted to the individual needs of the candidate with the permission of the Spanish adviser.

**Japanese:** Students in the Minor program in Japanese with a Business Orientation must complete 15 credit hours of upper-level Japanese courses. Required courses are: Advanced Japanese (6 credit hours): JAPN 3116 (or equivalent)

Core Requirements: (6 credit hours): JAPN 3033, and JAPN 4333

Electives (3 credit hours): JAPN 3983, JAPN 4033, JAPN 4213 or JAPN 4313

In some cases, elective courses may be adjusted to the individual needs of the candidate with the permission of the Japanese adviser.

For information on advanced degrees in foreign languages, see the Graduate School Catalog.

### Requirements for Honors in Foreign Languages:
The Honors Program in Foreign Languages gives students of high ability the opportunity to conduct independent research culminating in an honors thesis. In addition to satisfying general graduation requirements and all requirements for honors separately established by the Honors Council, candidates for honors in Foreign Languages must:

1. complete 12 hours of honors credit. One to six of these may be honors thesis hours; the remaining hours should be taken in disciplines chosen in consultation with the adviser;
2. complete an honors thesis in the major field, and pass an oral examination on the thesis conducted by an honors committee, as evidence of substantial individual research skills;
3. demonstrate superior competence in language, culture, and literature by achieving a GPA of 3.5 in all upper-division courses submitted for the major.

Successful completion of these requirements will be recognized by the award of the distinction “Language Scholar Cum Laude.” Higher degree distinctions are recommended only in truly exceptional cases and are based upon the whole of the candidate’s program of honors studies.

### Foreign Language (B.A.) Teacher Licensure Requirements:
Please refer to the Secondary Education Requirements for Fulbright College Students on page 125.

See Page 408 for World Languages, Literatures and Cultures (WLLC) courses; Check Page 409 for alphabetical listings of specific languages.
Mission Statement

The Walton College, the flagship business school of the state of Arkansas, has a three-fold mission:

Teaching: Educate a diverse population of students in bachelor’s, master’s, and doctoral programs to be tomorrow’s business, community, and academic leaders;

Research: Discover and disseminate knowledge through our research to support excellence and innovation in organizations; and

Service: Share our business expertise in support of our state, our professions, and the academic community.

FACILITIES AND RESOURCES

The Walton College offers degree programs for undergraduate students and for graduate students at both the master’s and doctoral levels. The Walton College is housed in four modern buildings supporting on-campus programs. These attractive facilities provide technology-equipped classrooms and eight state-of-the-art computer laboratories for both for business classes and individual use. The buildings also house faculty and administrative offices, an honors program study area with computer access, the Walton College Career Center, and large study areas equipped for individual as well as group studying.

The library of the college is part of the general University Libraries and is housed in Mullins Library. The business and economics collection comprises approximately 55,000 volumes and makes this library one of the best in the region.

Walton College also operates centers for research, outreach, and public service. Information about these centers may be found in the University Centers and Research Units section of this catalog. Walton College centers include the following:

- Arkansas Household Research Panel
- Applied Sustainability Center
- Bessie B. Moore Center for Economic Education
- Center for Business and Economic Research
- Center for Management and Executive Education
- Center for Retailing Excellence
- Garrison Financial Institute
- Information Technology Research Center
- Supply Chain Management Research Center
- Small Business Development Center

DEGREES OFFERED

Undergraduate students may pursue curricula leading to one of the following degrees: Bachelor of Science in Business Administration (B.S.B.A), Bachelor of Science in International Business (B.S.I.B.). In each of these degree programs, the pre-business requirements must be completed before students may enroll in upper division business courses. Students in Walton College may pursue an academic minor in business or in the J. William Fulbright College of Arts and Sciences. Walton College also offers business minors for non-business students. Degree programs and minors are outlined on subsequent pages.
Students may seek either to qualify a job they have found themselves for co-op credit, or they may seek an employment opportunity through the Walton College Career Center, WJWH 226. The employment opportunity may be either a full-time, off-campus work assignment that alternates with semesters spent on campus taking courses (an alternating co-op), or it may be a part-time job undertaken concurrently with course work (a parallel co-op). Once a student has been matched with an approved job, the co-op coordinator, the faculty co-op adviser, the student's work place supervisor, and the student work together to formulate career-related learning objectives for the coming semester of work. These objectives must be in writing and in to the cooperative education coordinator in order for a student to be registered for co-op.

At the end of each semester of work, the student is required to submit a three- to ten-page paper (depending on credit hours to be received) that re-states the student's learning objectives for the semester and discusses how the job experience fulfilled the objectives. The student is also required to submit an employer evaluation form, and the work supervisor is asked to submit an evaluation of the student's work.

For more information on participating in Walton College co-op program, a current listing of co-op opportunities, and phone numbers of people with whom you may discuss these opportunities, visit the Cooperative Education home page on the Web at http://waltoncollege.uark.edu/coop/.

### COLLEGE ADMISSION REQUIREMENTS

All students admitted to the University of Arkansas, Fayetteville, are eligible for admission to the Sam M. Walton College of Business. Students will be required to follow the degree program requirements set forth in the catalog corresponding to the student's first semester in Walton College, not the first semester of enrollment at the University of Arkansas.

### COLLEGE SCHOLARSHIPS

High school graduates who expect to enroll in Walton College are encouraged to apply for scholarships made available to freshmen by individuals, business firms, and organizations. Also available to freshmen, regardless of degree program, are freshmen academic scholarships. Current Walton College students may apply for both college and departmental scholarships beginning in January of each year for the following academic year. Information on these financial awards may be secured from the University Scholarship Office and the Walton College Undergraduate Programs Office.

### STUDENT ORGANIZATIONS

In addition to the general university student organizations, Walton College Student Ambassadors, Study Abroad Ambassadors, Leadership Walton and a Business Dean's Student Advisory Board, there are several college societies open to Walton College students. These include the following:

- Alpha Kappa Pi (business professional)
- American Marketing Association
- Association of Information Technology Professionals
- Beta Alpha Psi (accounting honorary and professional)
- Beta Gamma Sigma (business honorary)
- Economics Club
- Capital Markets Group (Finance Club)
- Council of Supply Chain Management Professionals
- National Association of Black Accountants
- Omicron Delta Epsilon (economics honorary)
- Human Resource Management Association
- S.I.E.E. (Students in Free Enterprise)
- Transportation and Logistics Association
- Women in Logistics

---

**MAJORS, CONCENTRATIONS, AND MINORS**

**Majors with Concentrations**

Accounting
Economics
Business Economics
International Economics and Business
Finance
 Banking
Financial Management/Investment
Insurance
Real Estate
Personal Financial Management
General Business
Information Systems
Enterprise Systems
IT Applications Management
Resource Planning
Management
Human Resource Management
Small Business and Entrepreneurship
Organizational Leadership
Marketing
Retail
Supply Chain Management

**Minors**

Accounting
Business Economics
Enterprise Resource Planning
Finance
Financial Economics
Information Systems
International Business
Management
Marketing
Retail
Supply Chain Management

**OTHER PROGRAMS**

**Cooperative Education**

Cooperative education (co-op) is an academic program that enables students to gain degree-related experience prior to graduation. It is a planned, progressive educational strategy in which the student obtains work experience related to his or her academic major and career goals. Participating students earn academic credit for their work experiences and are always paid by their employers. Co-op students can maintain their status as full-time students while participating in the program, even if their co-op experience requires they spend a semester working full-time.

Walton College students are eligible for co-op credit if they have 1) completed the pre-business core and have obtained at least 60 hours of credit, 2) a cumulative grade-point average of 2.5 or better, and 3) a grade-point average of 2.5 or better for the last full-time term completed. Students may receive one hour of credit per semester for a job that requires 12-19 hours of work per week or two hours of credit per semester for a job that requires 20 or more hours per week. A maximum of six hours of degree credit may be awarded as a junior- senior-level business elective. Students may not utilize cooperative education credit toward major course requirements unless approved by department chair. Full-time students who work 40 hours or more per week in internships approved by the co-op education academic coordinator are eligible for three hours of academic credit per semester, or per full summer, provided they have a minimum GPA of 2.75, as well as having received a GPA of at least 2.75 in the prior full-time semester.
COLLEGE ACADEMIC REGULATIONS

Pre-Business Requirements

Students pursuing a degree in Walton College are classified as pre-business with an intended major until all pre-business requirements are fulfilled. The following policies apply to the pre-business program:

To be eligible to enroll in upper-division business courses in Walton College, a student must complete the Walton College computer competency requirement (WCOB 1120) and maintain at least a 2.50 (on a 4.00 scale) overall grade-point average (GPA) in addition to completing the 36 credit hours listed below of pre-business core courses (or their equivalents), also with at least a 2.50 GPA. Further, a student must complete all courses offered to meet this requirement with a grade of “C” or better or the requirement for graduation. The pre-business core courses are as follows:

- COMM 1313 Public Speaking
- ECON 2013 Principles of Macroeconomics
- ECON 2023 Principles of Microeconomics
- MATH 2043 Survey of Calculus
- MATH 2053 Finite Mathematics
- WCOB 1111 Freshman Business Connections
- WCOB 1012 Legal Environment of Business
- WCOB 1023 Business Foundations
- WCOB 1033 Data Analysis and Interpretation
- WCOB 2013 Markets and Consumers
- WCOB 2023 Production and Delivery of Goods and Services
- WCOB 2033 Acquiring and Managing Human Capital
- WCOB 2043 Acquiring and Managing Financial Resources

Students’ records will be evaluated each semester to determine whether a student should be moved to a major and have pre-business classification removed. After receiving notification that a student has been admitted into his or her major, the student must complete all courses offered to meet this requirement with a grade of “C” or better or the requirement for graduation. The pre-business core courses are as follows:

- COMM 1313 Public Speaking
- ECON 2013 Principles of Macroeconomics
- ECON 2023 Principles of Microeconomics
- MATH 2043 Survey of Calculus
- MATH 2053 Finite Mathematics
- WCOB 1111 Freshman Business Connections
- WCOB 1012 Legal Environment of Business
- WCOB 1023 Business Foundations
- WCOB 1033 Data Analysis and Interpretation
- WCOB 2013 Markets and Consumers
- WCOB 2023 Production and Delivery of Goods and Services
- WCOB 2033 Acquiring and Managing Human Capital
- WCOB 2043 Acquiring and Managing Financial Resources

Registration in Junior/Senior-Level Walton College Courses

Walton College students must complete the pre-business requirements prior to enrollment in junior- or senior-level courses in Walton College.

Non-degree seeking students and students enrolled in other colleges are subject to the same course prerequisites as students within Walton College. Specific exceptions to this policy must be addressed to the associate dean for academic affairs in Walton College or his designee.

Restrictions on General Education Electives: Only six hours total of general education electives will be allowed in Physical Education Activity (PEAC) or Dance Education Activity (DEAC) courses.

Transfer of Credit Policies

In addition to the University policies controlling the granting of credit for course work taken at other institutions, the following policies apply to transfer work applied to any undergraduate business program:

1. Transfer students considering admission to pursue a major in Walton College must have completed the pre-business courses and requirements listed above and have a 2.50 (on a 4.00 scale) cumulative grade-point average in the pre-business courses and in his or her overall grade-point average. Transfer students will be classified as pre-business students until pre-business core requirements have been completed.
2. A pre-business and overall grade-point average for courses accepted for transfer by the University of Arkansas will be calculated and used to evaluate the completion of the pre-business requirements by students transferring courses from other institutions.
3. If a student takes courses with different names but with similar content at different institutions or in different colleges within the University of Arkansas, degree credit will be allowed for only one of the courses, for example, principles of economics and agricultural economics.
4. A transferred course cannot carry more degree hours than are available in a similar University of Arkansas course. For example, a four-hour principles of economics course transfers as three degree hours.
5. Business courses completed at the freshman or sophomore level at another institution will not count as equivalents of junior- or senior-level courses offered in Walton College (University of Arkansas), and no transfer credit shall be granted for any such course(s) in Walton College.
6. All upper division courses within a student’s major and Business Strategy and Planning (WCOB 3016) must be taken in residence at the University of Arkansas, Fayetteville.
7. Junior- or senior-level core courses in business and economics may be transferred from a school accredited by AACSB International.
8. Junior- or senior-level core courses taken at a non-AACSB International-accredited, four-year institution must either be repeated or validated by procedures specified and approved by the assistant dean for undergraduate programs.
9. Junior- or senior-level electives in business and economics may be transferred from a school accredited by AACSB International.
10. Junior- or senior-level courses in business taken by correspondence at AACSB International or non-AACSB International institutions may not be accepted and transferred for degree credit unless the course is approved by the student’s department chair and the associate dean.
11. If a student takes courses with different names but with similar content at different institutions or in different colleges within the University of Arkansas, degree credit will be allowed for only one of the courses, for example, principles of economics and agricultural economics.
12. Courses taken at any higher education institution where the course content is remedial are not acceptable for degree credit.
13. The student must be prepared to submit course descriptions, syllabi, or other course-related information for transfer course work if there is any question as to whether Walton College will grant degree credit for such work.
14. Exceptions: All requests for, exceptions to, and variations from the rules, regulations, and requirements of Walton College and the university should be made in writing to the assistant dean for undergraduate programs of Walton College. Consult the Undergraduate Programs Office in Walton College for these requests.

Course Loads

The normal course load in Walton College is 15 to 17 hours per semester (and six hours per summer term). Students with a 2.75 grade-point average the previous semester may take a maximum of 18 hours. Seniors may take 18 to 19 hours, if required for graduation, during their final semester. Students on academic warning are limited to a maximum course load of 12 hours. University regulations on the number of hours allowed per semester are found in the Orientation and Registration section of this catalog.

Foreign Language Concentration

An undergraduate B.S.B.A. degree-seeking student may elect to substitute 12 hours in a single upper-level foreign language for 12 to 15 of the 12-15 hours required in the junior-senior business elective block of courses for the degree requirements.

Double Major

A student may elect to obtain a double major by completing all required courses for two majors in Walton College (but not in two concentrations within a single major). The minimum hour requirement for a double major is 138 degree credit hours to include all requirements for both majors. If there are courses common to both majors, the department chairs involved will agree upon and specify additional requirements in lieu of the common courses. The junior/senior business elective block is reduced by three hours; however, choice of the junior/senior business electives is restricted to no more than three total hours from each department that offers the two majors. Students who have elected to substitute a foreign language course of study for junior/senior business electives must complete 12 hours of junior/senior language courses.

The student must notify the Undergraduate Programs Office in Walton Col-
lege of intent to pursue a double major. All requirements for double majors must be completed prior to awarding of a degree.

**Business Minors**

Students may elect to obtain a business major and a business minor by completing all required courses for both the major and the minor in the Walton College (but not a major and minor within the same discipline). Students must complete all requirements for both the major and the minor and may not use more than six hours of major courses toward minor requirements. However, if there are common courses to both, the department chairs involved will agree upon and specify additional requirements.

**Additional Bachelor's Degrees**

Students seeking a second bachelor's degree must contact the Undergraduate Programs Office to ascertain specific requirements. Degree candidates must meet the university's general graduation requirements. The university requires that 1) the student take a minimum of 30 semester hours over the requirements for the first degree, and 2) the 30 hours cover a minimum of 36 weeks in residency at the Fayetteville campus. Walton College also requires that the student complete all courses in the pre-business and business core and the major and any additional business requirements (if some of these have been completed on the first degree, they are waived). It is recommended that any additional courses needed to finish the University's 30-hour requirement be junior or senior business electives. The second degree may be taken after the first is awarded, or both degrees may be awarded simultaneously after completion of all requirements for both.

**College Graduation Requirements**

1. **University Requirements.** Degree candidates must meet the following: the University's general entrance requirements, number of credit hours required in residence, and the “requirements for graduation,” including the University Core American history.

2. **Hour Requirements.** Degree candidates must satisfactorily complete the total number of semester hours specified for the curriculum in courses approved for one of the majors outlined in the succeeding pages. No less than 50 percent of the total credits must be in approved subjects other than business.  

   **NOTE:** Not all courses offered by the University will be accepted for degree credit by Walton College. Courses falling into this category are ANTH 0003, PHSC 0003, ARSC 0013, ENGL 0003, and MATH 0003. Developmental courses are defined as 1) any course so designated by the university, and 2) any lower-division course taken after a higher-level course is taken. Credit will not be given for duplicate course work.

3. **Grade Requirements.** Students must earn a grade of “C” or better in all pre-business core course requirements. Each student must have a 2.00 cumulative GPA in each of the following areas:
   a. All work completed at the University of Arkansas.
   b. All courses specifically designated for the major.
   c. All required business core courses and required economics courses.

4. **General Education Course Work.** A student’s general education course work must satisfy University Core Requirements, additional college/program course-specific requirements, as well as these two area requirements:
   a. Social Issues, Multicultural Environment, and Demographic Diversity, and  
   b. Micro and Macroeconomics. If a student has not satisfied these area requirements within the fine arts and/or social sciences areas of the university core, these area requirements must be satisfied through general education electives to allow students to complete degree requirements within the hours indicated above. Courses that satisfy these area requirements are listed below. NOTE that many of these courses will also satisfy University Core Requirements. Where possible, a student should select courses that satisfy both requirements:
   a. Social Issues, Multicultural Environment, and Demographic Diversity

   ANTH 1023 Intro. to Cultural Anthropology (Univ. core)  
   SOCI 2013 General Sociology (Univ. core)  
   SOCI 2033 Social Problems (Univ. core)  
   HIST 1113 Institutions and Ideas of World Civilization (Univ. core)  
   HIST 1123 Institutions and Ideas of World Civilization II (Univ. core)  
   GEOG 1123 Human Geography (Univ. core)  
   Any Foreign Language (Univ. core, if 2000-level or above, general education elective otherwise)

   b. Micro/Macro Economics  
   ECON 2013 Principles of Microeconomics (business core)  
   ECON 2023 Principles of Microeconomics (business core)

5. **Enrollment Requirement.** Students must earn a minimum of 30 semester hours on the Fayetteville campus – this includes study abroad classes, on-line and Global Campus courses. Other courses paid toward Fayetteville campus tuition and fees may be used with the approval of the student’s Dean’s Office. These 30 semester hours must include WCOB 3016 and 24 hours of upper division courses required for the completion of the major and/or degree program.

6. **Correspondence Course Rules.** No more than 18 hours of course work taken by correspondence may apply toward a degree. These 18 hours may not include more than 12 hours of courses in economics or business.

7. **Catalog/Curriculum Changes.** Business is a dynamic profession, and the college and department curricula are updated continuously to keep pace with changes in the business world. Students entering under this catalog will be required to comply with such curricular changes to earn their degree. The total number of hours required for the degree, however, may not be increased, and all work completed in accordance with this catalog prior to the curriculum change will be applied toward the student’s degree requirements. Furthermore, courses incorporated into the curriculum at a level lower than the one the student has completed are not required for that student unless there are specific prerequisites. Students entering under earlier catalogs are responsible for completing the graduation requirements as published in the catalog in effect when they entered the program. Students having interruptions of their academic programs that exceed two calendar years must complete the requirements published in the catalog in effect when they re-enter the program. Exceptions to the graduation requirements must be approved by the senior associate dean for academic programs and research or his designee and the appropriate department chair.

**Graduation with Honors**

The bachelor's degree Summa Cum Laude (with highest honors), Magna Cum Laude (with high honors), or Cum Laude (with honors) may be conferred only upon those students who have successfully completed the Walton College Honors Program. Both Walton Scholars and Departmental Scholars are eligible for these designations. Students whose cumulative grade-point average place them in the top 10 percent of their graduating class but who have not completed the Honors Program are eligible for the designation “With Distinction” on their official transcript. Among those students completing the Honors Program, the designations Summa Cum Laude, Magna Cum Laude, and Cum Laude shall be determined as follows:

- Top 20 percent of students completing the Honors Program: Summa Cum Laude
- Next 30 percent of students completing the Honors Program: Magna Cum Laude
- Next 50 percent of students completing the Honors Program: Cum Laude

No honors degree will be conferred upon a candidate who has not completed at least 50 percent of his or her degree work at the University of Arkansas or who, in the last four semesters of attendance, has a cumulative grade-point average of less than 3.00 or has received a “D” or “F” in any course in the last semester. Certain other requirements will be outlined on request by the dean of the College.
EIGHT-SEMESTER DEGREE PROGRAM POLICY

The Walton College offers an eight-semester degree-completion program. In each of the majors listed in this chapter, at least one eight-semester schedule is shown. Some majors offer several concentrations, and eight-semester programs are available for each of the concentrations in Section Two of the Catalog of Studies, online at http://catalogofstudies.uark.edu.

See also page 42 in the Academic Regulations chapter for information about the University's degree-completion program.

HONORS PROGRAM

Walton College honors program consists of two components: the four-year Walton Scholars Program and the Departmental Scholars Program. Students participating in the honors program will be eligible to graduate Cum Laude, Magna Cum Laude, or Summa Cum Laude. Students who do not participate in the honors program are eligible to graduate with distinction, a classification separate from the Cum Laude awards. Honors program students will receive priority for participation in the Arkansas Cooperative Education Program, SAKE, the portfolio management class, and financial support for study-abroad programs. They also have access to an honors study area.

Eligibility for the Honors Program

Admission will be offered to incoming freshmen with a minimum ACT/SAT score of 28/1240 or higher and a high school GPA of 3.75. Honors students are required to maintain a cumulative GPA of 3.50 with no grades of “D” or “F” in any course to remain in the program. All honors students are required to meet with the Assistant Director for Honors Programs each semester to monitor progress of honors requirements. Students who maintain a GPA of 3.50 but do not complete honors requirements in a timely manner are subject to removal from the Honors Program at the discretion of the Director of the Honors Program.

Requirements for Walton Scholars Program:

1. Complete 17 hours in honors courses with a minimum of 8 hours completed from the following honors business courses ECON 2013H, 2023H, WCOB 1012H, 1023H, 1033H, 2013H, or 2033H (excluding WCOB 1111H). The remaining honors hours may be selected from the University Core.

2. Students must demonstrate proficiency in a foreign language by completing a 2003-level course other than their native language or a third language from Arabic, Chinese, French, German, Italian, Japanese, or Spanish or COMM 2303 and 2323. Students must complete a foreign language or communications course within the first 90 hours at the Fayetteville campus.

3. Students must also complete MATH 2554 with a grade of “C” or better within the first 60 hours at the Fayetteville campus and prior to taking upper level business courses.

4. Complete the following courses in Walton College:
   a. Two three-hour colloquium courses chosen from the following: WCOB 3003H (may be repeated for up to 6 hours of credit) or ACCT 4003H, ECON 4003H, FINN 4003H, MGMT 4003H, ISYS 4003H, MKTG 4003H, SPCM 4003H or other business honors colloquium courses offered irregularly. One three-hour colloquium must be completed within the first 90 hours at the Fayetteville campus.
   b. A three-hour thesis (WCOB 4993H): The thesis is a major independent writing project under the leadership of a Walton College or University of Arkansas faculty member and arises from a research project, business plan, business competition, or internship.

5. Complete an alternate honors capstone course WCOB 3016H, Business Strategy and Planning, which should be completed within the first 90 hours at the Fayetteville campus.

Requirements for the Departmental Scholars program:

Admission to the Honors Program as a departmental scholar will only be offered to current University of Arkansas students who have established a cumulative GPA of 3.75 upon completion of their freshmen year at the University of Arkansas. Transfer students may also apply upon completion of one semester at the University of Arkansas with a GPA of 3.75. All students must complete an application to be considered for acceptance into the departmental scholars program.

Honors students are required to maintain a cumulative GPA of 3.50 with no grades of “D” or “F” in any course to remain in the program. All honors students are required to meet with the Assistant Director for Honors Programs each semester to monitor progress of honors requirements. Students who maintain a GPA of 3.50 but do not complete honors requirements in a timely manner are subject to removal from the Honors Program at the discretion of the Director of the Honors Program.

1. Complete nine hours of honors courses to be selected from pre-business core or University Core. MATH 2564 may be used as honors credit towards completion of the 9 required honors hours.

2. Students must demonstrate proficiency in a foreign language by completing a 2003-level course in any foreign language. Students whose native language is not English must complete a 2003-level course other than their native language or a third language from Arabic, Chinese, French, German, Italian, Japanese, or Spanish or COMM 2303.

3. Students must also complete MATH 2554 with a grade of “C” or better within the first 60 hours at the Fayetteville campus and prior to taking upper level business courses.

4. Complete the following courses in Walton College:
   a. Two three-hour colloquium courses chosen from the following: WCOB 3003H (may be repeated for up to 6 hours of credit) or ACCT 4003H, ECON 4003H, FINN 4003H, MGMT 4003H, ISYS 4003H, MKTG 4003H, SPCM 4003H or other business honors colloquium courses offered irregularly. One three-hour honors colloquium must be completed within the first 90 hours at the Fayetteville campus.
   b. A three-hour thesis (WCOB 4993H): The thesis is a major independent writing project under the leadership of a Walton College or University of Arkansas faculty member and arises from a research project, business plan, business competition, or internship.

DEGREE REQUIREMENTS

Bachelor of Science in Business Administration (B.S.B.A.)

The Bachelor of Science in Business Administration degree is offered through an educational program in the business and organizational disciplines intended to prepare individuals to make sustained contributions to organizations and society in a global, diverse, and dynamic environment. To achieve this objective the curriculum focuses on developing an individual’s interdisciplinary problem-solving skills, interpersonal and communication skills, ability to adapt to changing technology, spirit of entrepreneurial innovation, and ethical and professional values.

Walton College offers work in the following eight majors for the B.S.B.A. degree. Some majors have concentrations to allow additional specialization.

1. Accounting (ACCT)
2. Business Economics (BECO)
   a. Concentration I – Business Economics
   b. Concentration II – International Economics and Business
3. Finance (FINN)
   a. Concentration I – Banking
   b. Concentration II – Financial Management/Investment
   c. Concentration III – Insurance
   d. Concentration IV – Real Estate
   e. Concentration V – Personal Financial Management
4. General Business (GBUS)
5. Information Systems (ISYS)
Students pursuing a degree in Walton College are classified as pre-business with an intended major until all pre-business requirements are fulfilled. To enroll in upper-division courses, a student must obtain at least a 2.50 (on a 4.00 scale) overall grade-point average in addition to the completion of all pre-business core courses (or equivalents), as well with a minimum 2.50 GPA. Further, a student must earn a grade of “C” or better in each of the pre-business core course for admission into the major or for the graduation requirement.

### A. University Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition (two courses)</td>
<td>6</td>
</tr>
<tr>
<td>Finite Mathematics**</td>
<td>3</td>
</tr>
<tr>
<td>American History or Government</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science (two courses with labs)</td>
<td>8</td>
</tr>
<tr>
<td>Social Science (three courses)</td>
<td>9</td>
</tr>
<tr>
<td>Fine Arts &amp; Humanities (two courses)</td>
<td>6</td>
</tr>
</tbody>
</table>

### B. Additional Requirements for Business Students

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Speaking*</td>
<td>3</td>
</tr>
<tr>
<td>Survey of Calculus*</td>
<td>3</td>
</tr>
<tr>
<td>Business Social Science (one of the following)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2003 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3013 Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3023 Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 3103 Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4063 Psychology of Personality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4073 Psychology of Learning</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 4123 Perception</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 2013 General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 3223 Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 3303 Social Data and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 4063 Organizations in Society</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 2003 American National Government</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 3103 Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 3243 The Judicial Process</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 3803 International Organization</td>
<td>3</td>
</tr>
<tr>
<td>PLSC/SOCI 4053 Political Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

### C. Business Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCOB 1120 Computer Competency Requirement*</td>
<td>2</td>
</tr>
<tr>
<td>WCOB 1111 Freshman Business Connections*</td>
<td>2</td>
</tr>
<tr>
<td>WCOB 1012 Legal Environment of Business*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 1023 Business Foundations*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 1033 Data Analysis and Interpretation*</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2013 Principles of Macroeconomics*</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2023 Principles of Microeconomics*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2013 Markets and Consumers*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2023 Prod. and Delivery of Goods and Services*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2043 Acquiring and Managing Financial Resources*</td>
<td>3</td>
</tr>
</tbody>
</table>

### University Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCOB 3016 Business Strategy and Planning</td>
<td>6</td>
</tr>
</tbody>
</table>

### D. Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2023 Principles of Microeconomics*</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2013 Principles of Macroeconomics*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2013 Markets and Consumers*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2023 Prod. and Delivery of Goods and Services*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2043 Acquiring and Managing Financial Resources*</td>
<td>3</td>
</tr>
</tbody>
</table>

### Upper-Division Requirement

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCOB 3016 Business Strategy and Planning</td>
<td>6</td>
</tr>
</tbody>
</table>
### C. Business Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2013</td>
<td>Accounting Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3533</td>
<td>Accounting Technology</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3613</td>
<td>Managerial Uses of Accounting Information</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3723</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 1023</td>
<td>Business Foundations*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 1033</td>
<td>Data Analysis and Interpretation*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2023</td>
<td>Markets and Consumers*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2033</td>
<td>Prod. and Delivery of Goods and Services*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2034</td>
<td>Acquiring and Managing Financial Resources*</td>
<td>3</td>
</tr>
</tbody>
</table>

### Lower-Division Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCOB 1120</td>
<td>Computer Competency Requirement*</td>
<td>0</td>
</tr>
<tr>
<td>WCOB 1111</td>
<td>Freshman Business Connections*</td>
<td>1</td>
</tr>
<tr>
<td>WCOB 1012</td>
<td>Legal Environment of Business*</td>
<td>2</td>
</tr>
<tr>
<td>WCOB 1023</td>
<td>Business Foundations*</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3133</td>
<td>Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3033</td>
<td>Microeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 1033</td>
<td>Data Analysis and Interpretation*</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2013</td>
<td>Principles of Macroeconomics*</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2023</td>
<td>Principles of Microeconomics*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2013</td>
<td>Markets and Consumers*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2023</td>
<td>Prod. and Delivery of Goods and Services*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2034</td>
<td>Acquiring and Managing Human Capital*</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2044</td>
<td>Acquiring and Managing Financial Resources*</td>
<td>3</td>
</tr>
</tbody>
</table>

### D. International Business and Collateral Course Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 4633</td>
<td>Economics of Organizations</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4743</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>Junior Senior ECON</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Plus six hours JR/SR interdisciplinary electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Information Systems</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>ISYS 2263</td>
<td>Intro. to Information Systems Development</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 3293</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 3393</td>
<td>Business Application Development Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 4283</td>
<td>Business Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>Plus three hour JR/SR information systems course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Plus six hours JR/SR interdisciplinary electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Finance</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>FINN 3603</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>FINN 4233</td>
<td>Advanced Corporate Finance, or</td>
<td>3</td>
</tr>
<tr>
<td>FINN 4133</td>
<td>Advanced Investments</td>
<td>3</td>
</tr>
<tr>
<td>Plus three hour JR/SR finance course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Plus six hours JR/SR interdisciplinary electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>MKTG 3633</td>
<td>Marketing Research</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3553</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 4853</td>
<td>Marketing Mgmt.</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 4633</td>
<td>Global Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Plus three hour JR/SR marketing course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Plus six hours JR/SR interdisciplinary electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Supply Chain Management</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
<tr>
<td>SPCM 3443</td>
<td>Principles of Transportation</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 3613</td>
<td>Business Logistics</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 3643</td>
<td>International Transportation and Logistics</td>
<td>3</td>
</tr>
<tr>
<td>Plus six hours JR/SR supply chain management courses</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Plus six hours JR/SR interdisciplinary electives</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

### E. Business Concentration

Students must complete one of the following business concentrations:

#### Accounting

- ACCT 2013 Accounting Principles (3 hours)
- ACCT 3533 Accounting Technology (3 hours)
- ACCT 3613 Managerial Uses of Accounting Information (3 hours)
- ACCT 3723 Intermediate Accounting I (3 hours)
- Plus three hour JR/SR accounting course (3 hours)
- Plus six hours JR/SR interdisciplinary electives (6 hours)

#### Business Economics

- ECON 3033 Microeconomic Theory (3 hours)
- ECON 3133 Macroeconomic Theory (3 hours)
- ECON 4333 Economics of Organizations (3 hours)
- ECON 4743 Introduction to Econometrics (3 hours)
- Junior Senior ECON (3 hours)
- Plus six hours JR/SR interdisciplinary electives (6 hours)

#### Foreign Language Requirements

Students whose native language is English or whose native language is not taught at the University of Arkansas must complete 12 hours of university course work in a single foreign language — six hours of intermediate language and six hours of upper-division course work in communications and business language, or equivalent. Students who, on the basis of prior knowledge of language, omit one or both courses in the intermediate language sequence — 2003 and 2013 level — may receive degree credit for omitted courses if they validate their higher placement by passing the business language course (or equivalent) with a grade of "C" or above. Students with no previous foreign language training or only rudimentary knowledge of a foreign language will be required to complete up to six hours of elementary language — 1003 and 1013 level — in addition to the 12 hours of language specified above. No degree credit will be given for elementary language courses.

Students may select one of the following language tracks:

- Arabic — ARAB 2013, ARAB 2016, ARAB 3016 or equivalent
- French — FREN 2013, FREN 2016, FREN 3013 or equivalent
- German — GERM 2013, GERM 2016, GERM 3013 or equivalent
- Italian — ITAL 2013, ITAL 2016, ITAL 3013 or equivalent
- Japanese — JPN 2013, JPN 2016, JPN 3013 or equivalent
- Russian — RUS 2013, RUS 2016, RUS 3013 or equivalent
- Spanish — SPAN 2013, SPAN 2016, SPAN 3013 or equivalent
Chinese – CHIN 2003, CHIN 2013, CHIN 3033, and any other upper division CHIN
French – FREN 2003, FREN 2013, FREN 4333, FREN 3033 or FREN 3003
German – GERM 2003, GERM 2013, GERM 3003, and GERM 4333
Italian – ITAL 2003, ITAL 2013, ITAL 3003, and ITAL 3013
Japanese – JAPN 2003, JAPN 2013, JAPN 3003, and JAPN 3013
Spanish – SPAN 2003, SPAN 2013, SPAN 3003, and SPAN 4333

Students whose native language is not English but is taught at the University of Arkansas must select a third language from the list above or substitute six hours of upper-division English language courses (i.e., speech, writing, or U.S. literature), to be selected with the consent of an adviser and department chair. Those students whose native language is not taught at the University of Arkansas will normally be required to select a third language.

G. Area Studies Requirements

For students taking a foreign language, nine hours of upper-division course work in the J. William Fulbright College of Arts and Sciences are required. Domestic students can satisfy this requirement in one of three ways:
1) any upper division foreign language course,
2) minor in a foreign language, and/or
3) select upper division courses related to the foreign language to include:
   Arabic – any upper division course for Middle Eastern Studies (MEST) to include MEST 4003, 4003H or additional courses listed under MEST in the university catalog
   Chinese/Japanese/Asian Studies – any upper division course for Asian Studies (AIST)
   French – any upper division course for EUST
   German – any upper division course for EUST
   Italian – any upper division course for EUST
   Spanish – any upper division course for Latin American Studies (LAST) or European Studies (EUST) to include LAST 4003, LAST 4003H, or LAST 470V or additional courses listed under LAST in the university catalog, or EUST 399VH, EUST 4003, EUST 4003H, EUST 470V, or EUST 470VH or additional courses listed under EUST in the university catalog.

International students may satisfy this requirement in one of two ways:
1) For students who choose to take a third language, area studies requirements are the same as those for domestic students.
2) For students who choose to take six hours of upper division English to satisfy their language requirement, nine hours of upper division course work in the J. William Fulbright College of Arts and Sciences pertaining to the United States to include any upper division course for American Studies (AMST) listed in the University catalog.

H. International Experience Requirement

At a minimum, a domestic student must complete a study abroad program approved by the Walton College of at least four weeks and six credit hours, or work abroad, or work with the international division of a domestic company as part of their program. Students are strongly encouraged, but not required, to seek job experience in a company located in a country related to their foreign language requirement.

TOTAL DEGREE REQUIREMENTS

125

(Total is more than the sum of the categories because some courses count for multiple requirements.)

Claritying Notes on Degree Requirements

1. Courses that are required in either Walton College or the international business core and also are required in one of the business concentrations cannot be used to satisfy both requirements. For example, students who take FINN 3703 to satisfy the finance concentration requirements cannot also use it to satisfy the international business requirements.

2. Students who select ECON 2013 and ECON 2023 to partially satisfy the social science bloc and a foreign language numbered 2003 to partially satisfy the fine arts and humanities bloc of the University Core Requirements can complete the degree with 125 hours. Students selecting other courses to satisfy these requirements will have longer programs.

Bachelor of Science in International Business
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 42 in the Academic Regulations chapter for university requirements of the program. The International Business degree program has eight concentrations:

• Accounting
• Business Economics
• Finance
• General Business
• Information Systems
• Management
• Marketing
• Supply Chain Management

The first four semesters of each of concentration are exactly the same and are listed immediately below. The final four semesters of each concentration follow after that.

In addition to the coursework below, students must complete an International Experience Requirement. Courses in BOLD must be taken in the semester designated. Courses in ITALICS may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations noted below are preferred.

B.S.I.B. First Four Semesters

Fall Semester Year 1
3 ENGL 1013 Composition I – University Core
3 MATH 2043 Survey of Calculus **
3 WCOB 1012 Legal Environment of Business
1 WCOB 1111 Freshman Business Connections
2 WCOB 1012 Legal Environment of Business *
0 WCOB 1120 Computer Competency Requirement
3 Intermediate Foreign Language I (2003-level)
15 Semester Hours

Spring Semester Year 1
3 ENGL 2023 Composition II – University Core
3 WCOB 1023 Business Foundations
3 WCOB 1033 Data Analysis and Interpretation
3 ECON 2023 Microeconomics – University Core
3 Intermediate Foreign Language II (2013 level)
15 Semester Hours

Fall Semester Year 2
3 MATH 2043 Survey of Calculus **
3 ECON 2013 Macroeconomics ** - University Core
6 Select TWO of the following:
   WCOB 2013 Markets and Consumers
   WCOB 2023 Production and Delivery of Goods and Services
   WCOB 2033 Acquiring and Managing Human Capital
   WCOB 2043 Acquiring and Managing Financial Resources****
3 U.S. History or Political Science – University Core
3 Upper division foreign language course
18 Semester Hours

Spring Semester Year 2
3 Fine Art/Humanities – University Core or ACCT 2013 Accounting Principles (for Accounting concentration)
4 Natural Science – University Core
3 Upper division foreign language course
6 Select TWO of the following not completed in previous semester:
   WCOB 2013 Markets and Consumers
B.S.I.B. Accounting Final Four Semesters

Fall Semester Year 3
6 WCOB 3016 Business Strategy and Planning
3 Business Social Science
3 ACCT 3723 Intermediate Accounting I
3 International Business and Collateral Elective
15 Semester Hours

Spring Semester Year 3
3 ACCT 3533 Accounting Technology
3 ACCT 3613 Managerial Uses of Accounting
3 ECON 4633 International Trade
3 Area Studies Course – see the top of this page
3 Social Science – University Core
15 Semester Hours

Fall Semester Year 4
3 Fine Arts/Humanities – University Core
3 ECON 4643 International Macroeconomics and Finance
3 International Business and Collateral Elective
3 Area Studies Course
4 Natural Science – University Core
16 Semester Hours

Spring Semester Year 4
3 ACCT elective
3 Area Studies Course
3 International Business and Collateral Elective
6 Junior Senior Business Electives
15 Semester Hours
125 Total Hours

B.S.I.B. Business Economics Final Four Semester

Fall Semester Year 3
6 WCOB 3016 Business Strategy and Planning
3 Business Social Science
3 ECON 3133 Macroeconomic Theory
3 International Business and Collateral Elective
15 Semester Hours

Spring Semester Year 3
3 ECON 4743 Introduction to Econometrics
3 ECON elective
3 ECON 4633 International Trade
3 Area Studies Course – see page 210 in catalog
3 Social Science – University Core
15 Semester Hours

Fall Semester Year 4
3 ECON 4533 Economics of Organizations
3 ECON 4643 International Macroeconomics and Finance
3 International Business and Collateral Elective
3 Area Studies Course
4 Natural Science – University Core
16 Semester Hours

Spring Semester Year 4
3 Junior Senior ECON elective
3 Area Studies Course
3 International Business and Collateral Elective
6 Junior Senior Business Electives
15 Semester Hours
125 Total Hours

B.S.I.B. Finance Final Four Semesters

Fall Semester Year 3
6 WCOB 3016 Business Strategy and Planning
3 Business Social Science
3 FINN 3053 Financial Markets and Institutions
3 FINN 3013 Financial Analysis
15 Semester Hours

Spring Semester Year 3
3 FINN 3063 Investments or FINN 3603 Corporate Finance
3 FINN 3703 International Finance
3 ECON 4633 International Trade Policy
3 Area Studies Course – page 210 in catalog
3 Social Science – University Core
15 Semester Hours

Fall Semester Year 4
3 FINN 4133 Advanced Investments or FINN 4233 Advanced Corporate Finance
3 ECON 4643 International Macroeconomics and Finance
3 International Business and Collateral Elective
3 Area Studies Course
4 Natural Science – University Core
16 Semester Hours

Spring Semester Year 4
3 FINN elective
3 Area Studies Course
3 International Business and Collateral Elective
6 Junior Senior Business Electives
15 Semester Hours
125 Total Hours

B.S.I.B. General Business Final Four Semesters

Fall Semester Year 3
6 WCOB 3016 Business Strategy and Planning
3 Business Social Science
3 Junior Senior Business Elective
3 International Business and Collateral Elective
15 Semester Hours

Spring Semester Year 3
6 Junior Senior Business Electives
3 ECON 4633 International Trade
3 Area Studies Course – see page 210 in catalog
3 Social Science – University Core
15 Semester Hours

Fall Semester Year 4
3 Junior Senior Business Elective
3 ECON 4643 International Macroeconomics and Finance
3 International Business and Collateral Elective
3 Area Studies Course
4 Natural Science – University Core
16 Semester Hours

Spring Semester Year 4
3 Junior Senior Business Elective
3 Area Studies Course
3 International Business and Collateral Elective
6 Junior Senior Business Electives
15 Semester Hours
125 Total Hours

B.S.I.B. Information Systems

Fall Semester Year 3
6 WCOB 3016 Business Strategy and Planning
3 Business Social Science
3 ISYS 2263 Introduction to Information Systems
3 International Business and Collateral Elective
15 Semester Hours

Spring Semester Year 3
3 ISYS 3293 System Analysis and Design
3 ISYS 3393 Business Application Development Fundamentals
3 ECON 4633 International Trade
3 Area Studies Course – see page 210 in catalog
3 Social Science – University Core
15 Semester Hours

Spring Semester Year 4
3 ISYS 4283 Business Database Systems
3 ECON 4643 International Macroeconomics and Finance
3 International Business and Collateral Elective
3 Area Studies Course
4 Natural Science – University Core
16 Semester Hours

Fall Semester Year 4
3 ISYS 4283 Business Database Systems
3 ECON 4643 International Macroeconomics and Finance
3 International Business and Collateral Elective
3 Area Studies Course
4 Natural Science – University Core
16 Semester Hours
### Spring Semester Year 4
- 3 ISYS elective
- 3 Area Studies Course
- 3 International Business and Collateral Elective
- 6 Junior Senior Business Electives

**Semester Hours**: 15  
**Total Hours**: 125

#### B.S.I.B. Management Final Four Semesters

| Fall Semester Year 3 | 6 WCOB 3016 Business Strategy and Planning  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 Business Social Science</td>
</tr>
<tr>
<td></td>
<td>3 MKTG 4343 Introduction to Marketing Strategy (Jr Sr Business elective)</td>
</tr>
<tr>
<td></td>
<td>3 International Business and Collateral Elective</td>
</tr>
</tbody>
</table>

**Semester Hours**: 15

| Spring Semester Year 3 | 3 MKTG elective  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 MKTG 4583 International Management</td>
</tr>
<tr>
<td></td>
<td>3 ECON 4633 International Trade</td>
</tr>
<tr>
<td></td>
<td>3 Area Studies Course – see page 210 in catalog</td>
</tr>
<tr>
<td></td>
<td>3 Social Science – University Core</td>
</tr>
</tbody>
</table>

**Semester Hours**: 15

| Fall Semester Year 4 | 3 MKTG elective  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 ECON 4643 International Macroeconomics and Finance</td>
</tr>
<tr>
<td></td>
<td>3 International Business and Collateral Elective</td>
</tr>
<tr>
<td></td>
<td>3 Area Studies Course</td>
</tr>
</tbody>
</table>

**Semester Hours**: 15

| Spring Semester Year 4 | 3 ECON 4633 Principles of Transportation  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 ECON 4643 International Transportation and Logistics</td>
</tr>
<tr>
<td></td>
<td>3 ECON 4633 International Trade</td>
</tr>
<tr>
<td></td>
<td>3 Area Studies Course – see page 210 in catalog</td>
</tr>
</tbody>
</table>

**Semester Hours**: 15

### International Business Minor for Business Students

The Walton College offers a minor for students desiring more knowledge in international programs to assist them with their business careers. The minor requires completion of 21 required hours of study (including equivalencies). The 21 hours include the following courses:

- Select 15 hours from the following:
  - ECON 3843 Economic Development, World Bank, and Multilateral Finance
  - ECON 3853 Emerging Markets
  - ECON 3933 The Japanese Economic System
  - ECON 4633 International Trade
  - ECON 4643 International Macroeconomics and Finance
  - ECON 468V International Economics and Business Seminar
  - FINN 3703 International Finance
  - MGMT 4583 International Management
  - MGMT 4633 Global Marketing
  - SPCM 3643 International Transportation and Logistics
- 3 hours of Study Abroad led by Walton College faculty

Other—Department Chair Approval Needed

Students must also complete 6 hours of intermediate foreign language.

Students whose native language is English or whose native language is not taught at the University of Arkansas must complete six hours of university course work in a single foreign language. Students who, on the basis of prior knowledge of language, omit one or both courses in the intermediate language sequence — at 2003 and 2013 level — may receive degree credit for omitted courses if they validate their higher placement by passing the business language course (or equivalent) with a grade of “C” or above. Students with no previous foreign language training or only rudimentary knowledge of a foreign language will be required to complete up to six hours of elementary foreign language. Students whose native language is not English but is taught at the University of Arkansas must select a third language from the list below; or substitute six hours of upper-division English language courses (i.e., speech, writing, or U.S. literature), to be selected with the consent of the department chair. Those students whose native language is not taught at the University of Arkansas will normally be required to select a third language.

Students may select from one of the following language tracks:
- Arabic – 2016
- Chinese – CHIN 2003, CHIN 2013
- French – FREN 2003, FREN 2013 (or FREN 2013H)
German – GERM 2003, GERM 2013
Italian – ITAL 2003, ITAL 2013
Japanese – JAPN 2003, JAPN 2013 (or JAPN 2013H)
Russian – RUSS 2003, RUSS 2013
Spanish – SPAN 2003, SPAN 2013 (or SPAN 2013H)
Swahili – SWAH 2003, SWAH 2013

Students who desire to earn an International Business minor must notify the Walton College Undergraduate Programs Office of their intent to pursue a minor. All requirements for the minor must be completed prior to the awarding of the student's undergraduate degree. All specific course prerequisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor. All upper level minor requirements must be taken in residence.

### MINORS IN THE J. WILLIAM FULBRIGHT COLLEGE OF ARTS AND SCIENCES

Students in Walton College may pursue an academic minor in the J. William Fulbright College of Arts and Sciences. Academic minors usually consist of 15 to 18 hours of course work. The available minors and course requirements are specified in the Fulbright College section of this catalog. Students must notify the Undergraduate Programs Office in Walton College of their intention to pursue a minor as early as possible. Walton College will certify that the requirements of the minor have been satisfied by graduation and, with the assistance of the Fulbright College, will advise students on the requirements to complete a minor. The minor will be designated on the student's transcript.

Courses that are part of the University Core Requirements or the additional General Education Requirements or any other non-business course that is part of a student's course of study may also be counted for credit in a minor. For example, ANTH 1023 Introduction to Cultural Anthropology, is a concentration in the B.S.B.A. social science block and can be used to satisfy the requirements of the anthropology minor.

Other courses in a minor can be counted as general education electives. Walton College economics majors in the business economics concentration or the international economics and business concentration may not obtain a Fullbright College minor in economics.

### Business Administration Minors for Non-Business Students

To facilitate students outside Walton College in obtaining knowledge that will assist them in making sustained contributions to organizations and society in a global, diverse, and dynamic environment, the Walton College offers a business minor. The minor requires completion of 20 to 21 required hours of study (including equivalencies) with at least 50 percent of the courses applied toward the minor taken in residence. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor.

All upper level minor requirements must be taken in residence. All students seeking a business minor are required to complete the Walton College computer competency requirement (WCOB 1120) and the following courses:

**Concentration 1 – General Business**
- ECON 2143 Basic Economics Theory and Practice
- WCOB 1023 Business Foundations
- WCOB 1033 Data Analysis and Interpretation or equivalent

In addition, students must select and complete one of the following concentrations:

#### Concentration 2 – Accounting
- ACCT 2013 Accounting Principles
- ACCT 3613 Manageral Uses of Accounting Info
- ACCT 3723 Intermediate Accounting I

Plus an additional three hours selected from the following:
- ACCT 3533 Accounting Technology
- ACCT 3843 Fundamentals of Taxation

#### Concentration 3 – Business Economics
- ECON 3433 Economics of Organizations

Plus an additional nine hours of 3000- or 4000-level business economics courses.

#### Concentration 4 – Enterprise Resource Planning
- WCOB 2013 Markets and Consumers
- WCOB 2043 Acquiring and Managing Financial Resources
- WCOB 4213 ERP Fundamentals

Plus an additional three hours from the following:
- ISYS 4233 Seminar in ERP Development
- ISYS 4293 Business Intelligence
- WCOB 4223 ERP Configuration and Implementation

#### Concentration 5 – Enterprise Systems
- ISYS 4453 Introduction for Enterprise Servers
- ISYS 4463 Enterprise Transaction Systems

Plus an additional six hours from the following:
- ISYS 4233 Seminar in ERP Development
- ISYS 4293 Business Intelligence
- WCOB 4213 ERP Fundamentals
- WCOB 4223 ERP Configuration and Implementation

#### Concentration 6 – Finance
- WCOB 2043 Acquiring and Managing Financial Resources

Plus an additional nine hours of 3000–4000 level finance courses

#### Concentration 7 – Information Systems
- ISYS 3293 System Analysis and Design
- ISYS 3393 Business Applications and Development Fundamentals

Plus an additional three hours from the following:
- WCOB 4213 ERP Fundamentals
- WCOB 4223 Configuration and Implementation

One 3-hour 4000 level ISYS course

#### Concentration 8 – International Business
- Select 12 hours from the following:
  - ECON 3843 Economic Development, World Bank, and Multilateral Finance
  - ECON 3853 Emerging Markets
  - ECON 3933 The Japanese Economic System
  - ECON 4633 International Trade
  - ECON 4643 International Macroeconomics and Finance
  - ECON 468V International Economics and Business Seminar
  - FINN 3703 International Finance
  - MGMT 4583 International Management
  - MGMT 4783 International Transportation and Logistics
  - SPCM 3643 International Transportation and Logistics

#### Concentration 9 – Management
- MGMT 4243 Ethics and Corporate Responsibility

Plus an additional nine hours of 3000-4000 level management courses (may include WCOB 2033, Acquiring and Managing Human Capital OR MGMT 3563, Organizational Behavior)

#### Concentration 10 – Marketing
- MKTG 3433 Introduction to Marketing Strategy

Plus an additional nine hours selected from the following:
- MKTG 3553 Consumer Behavior
- MKTG 3633 Marketing Research
- MKTG 4233 Integrated Marketing Communications
- MKTG 4343 Selling and Sales Management
- MKTG 4633 Global Marketing
- MKTG 4433 Retail Strategy
- MKTG 4443 Retail Buying and Merchandise
- SPCM 3613 Business Logistics

#### Concentration 11 – Retail
- MKTG 3433 Introduction to Marketing Strategy

MKTG 3553 Consumer Behavior
- MKTG 4433 Retail Strategy
- MKTG 4443 Retail Buying and Merchandise

#### Concentration 12 – Supply Chain Management
- SPCM 3443 Principles of Transportation
The University of Arkansas offers the following advanced degrees in business:

- Master of Accountancy
- Master of Business Administration
- Master of Arts in Economics
- Master of Information Systems
- Doctor of Philosophy in Business Administration
- Doctor of Philosophy in Economics

For further information about these programs and requirements for admission, see the Graduate School Catalog or write to the assistant director of marketing and recruiting, Graduate School of Business, 475 WJWH.

**ACCOMPLISHMENTS**

The college has been a member of and accredited by AACSB International—The Association to Advance Collegiate Schools of Business since 1931. The accounting program was accredited separately in 1986 at both the bachelor's and master's level. The master's degree in the business administration program was approved in 1963. Accreditation by and membership in AACSB signifies commitment by the college to the goals of promoting and actualizing the highest standards of business education.

**GRADUATE STUDIES**

The University of Arkansas offers the following advanced degrees in business:

- Master of Accountancy
- Master of Business Administration
- Master of Arts in Economics
- Master of Information Systems
- Doctor of Philosophy in Business Administration
- Doctor of Philosophy in Economics

For further information about these programs and requirements for admission, see the Graduate School Catalog or write to the assistant director of marketing and recruiting, Graduate School of Business, 475 WJWH.

**ACCRREDITATIONS**

The college has been a member of and accredited by AACSB International—The Association to Advance Collegiate Schools of Business since 1931. The accounting program was accredited separately in 1986 at both the bachelor's and master's level. The master's degree in the business administration program was approved in 1963. Accreditation by and membership in AACSB signifies commitment by the college to the goals of promoting and actualizing the highest standards of business education.

**ACCOUNTING (ACCT)**

Vernon Richardson
Department Chair, 401 WCOB, 479-575-4051

**FACULTY**

- Walter B. Cole Chair in Accounting and Professor Bouwman
- Ralph McQueen Chair in Accounting and Professor Myers (J.)
- Garrison/Wilson Chair in Accounting and Professor Myers (L.)
- Nolan E. Williams Lecturer and Professor Norwood
- Doris M. Cook Chair in Accounting and Professor Peters
- Doyle Z. and Maynette Derr Williams Chair in Professional Accounting and Professor Pincus
- S. Robson Walton Chair in Accounting and Professor Richardson
- Associate Professor Sanchez (J.M.)
- BKD Lectureship in Accounting and Clinical Professor Leflar
- Assistant Professors Cassell, Chi, Cooper, Huang, Henderson, Keskek
- Instructors Greenhaw, Reid

The mission of the department of accounting is to cultivate an environment of educational excellence. We do so by pursuing the following endeavors:

- Providing a learning environment in which students interact with others to identify and solve accounting and business problems.
- Developing and disseminating knowledge that has the potential for significant impact on accounting, business, and education.
- Interacting with the accounting profession, the business and academic communities, and the community at large.

The department of accounting offers an undergraduate degree program in accounting and graduate programs at both the master's and doctoral levels. The department's programs are accredited by the AACSB – The International Association for Management Education, which ensures quality and promotes excellence and continuous improvement in undergraduate and graduate education. In addition, the accounting department offers courses in Business Law.

The objective of the B.S.B.A. accounting curriculum is to provide students with a broad overall education, solid grounding in the common body of knowledge of business administration, and exposure to accounting in sufficient depth to help them achieve entry-level competence for pursuit of a career in industry. The department also offers a five-year integrated program approach to receive the Master of Accountancy degree, which leads to the simultaneous award of the B.S.B.A. and the Master of Accountancy degrees. The integrated program is designed for students who wish to concentrate in accounting and obtain education in an accounting specialization. The objective of the integrated program is to provide students with advanced knowledge of accounting and business topics in order to obtain an accelerated position in accounting or help them launch a career in public accounting. Those students who are accepted into the integrated program or choose not to enroll in the integrated program will be allowed to graduate with a B.S.B.A. upon successful completion of the B.S.B.A. degree requirements and Accounting Major Requirements detailed below.

**Accounting Major Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the requirements for a B.S.B.A. degree as listed on page 203.</td>
<td></td>
</tr>
<tr>
<td><strong>Total General Education</strong></td>
<td>60</td>
</tr>
<tr>
<td><strong>Walton College Core Requirements (See page 206)</strong></td>
<td>33</td>
</tr>
<tr>
<td><strong>Course Requirements in the Major</strong></td>
<td>27</td>
</tr>
<tr>
<td>ACCT 2013 Accounting Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3533 Accounting Technology</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3613 Managerial Uses of Accounting Information</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3723 Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3753 Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 3843 Fundamentals of Taxation</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 4673 Product, Project and Service Costing</td>
<td>3</td>
</tr>
</tbody>
</table>
ACCT 4963 Audit and Assurance Services 3
Choose a total of three hours from any of the following courses: 3
ACCT 310V Spring Accounting Internship 3
ACCT 410V Special Topics in Accounting 3
ACCT 4003H Honors Accounting Colloquium 3
ISYS 2263 Introduction to Information Systems 3
WCOB 4213 ERP Fundamentals 3
Walton College Study Abroad Course 3

Junior-senior-level electives within Walton College 12
Maximum of 30 hours of ACCT courses in department (core, major, elective). More than 30 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.
Total Walton College Requirements 60
Total Degree Requirements 126

NOTE: Selection of electives should be made in consultation with academic advisers. Students planning on taking professional examinations should ascertain course requirements by examining authorities. Successful completion of a Master of Accountancy Degree from the University of Arkansas will qualify a student to take the CPA examination in Arkansas. B.S.B.A. graduates would need additional accounting courses amounting to a total of 150 semester hours to sit for the CPA exam in Arkansas.

Accounting B.S.B.A.
Eight-Semester Degree Program:

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENG 1013 Composition I – University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 MATH 2053 Finite Math – University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1 WCOB 1111 Freshman Business Connection</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>0 WCOB 1102 Legal Environment of Business *</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3 U.S. History or Political Science – University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>15 Semester Hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENG 1023 Composition II - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 WCOB 1023 Business Foundations</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 WCOB 1033 Data Analysis and Interpretation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 ECON 2023 Microeconomics – University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4 Natural Science – University Core</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>16 Semester Hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 MATH 2043 Survey of Calculus **</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 ECON 2013 Macroeconomics ** - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 WCOB 2043 Acquiring and Managing Financial Resources</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Select ONE of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WCOB 2013 Markets and Consumers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2023 Production and Delivery of Goods and Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Social Science – University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Fine Art/Humanities – University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>18 Semester Hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Fine Art/Humanities – University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4 Natural Science – University Core</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3 ACCT 3103 Accounting Principles</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6 Select TWO of the following not completed in previous semester:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>WCOB 2013 Markets and Consumers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2023 Production and Delivery of Goods and Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>16 Semester Hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ALL pre-business requirements should be met by end of term

Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ACCT 3723 Intermediate Accounting I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 ACCT 3613 Managerial Uses of Accounting Information</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6 WCOB 3016 Business Strategy and Planning</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>3 General Education Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>15 Semester hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ACCT 3553 Accounting Technology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 ACCT 3753 Intermediate Accounting II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 ACCT 3843 Fundamentals of Taxation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Junior Senior Business Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4 General Education Elective</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>16 Semester hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ACCT 4673 Production Project and Service Costing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 ACCT 4963 Audit and Assurance Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Junior Senior Business Electives</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4 General Education Electives</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>15 Semester hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>126 Total hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Choose a total of three credit hours from any of the courses below:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACCT 310V Accounting Internship</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACCT 410V Special Topics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACCT 4003H Honors Accounting Colloquium</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 4213 ERP Fundamentals</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ISYS 2263 Introduction to Information Systems</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6 Junior Senior Business Electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6 General Education Electives</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>15 Semester hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>126 Total hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Must be taken prior to fall semester of sophomore year
** Must be taken prior to fall semester of junior year

Accounting Minor for Business Students

The Department of Accounting offers a minor for Walton College students desiring more knowledge of accounting to assist them in their business careers. The minor requires the completion of 15 specific hours of study with all of the courses applied toward the minor taken in residence. The 15 hours include the following courses:

- ACCT 2013 Accounting Principles
- ACCT 3553 Accounting Technology
- ACCT 3613 Managerial Uses of Accounting Information
- ACCT 3723 Intermediate Accounting I
- ACCT 3843 Fundamentals of Taxation

Students who desire to earn an Accounting minor must notify the Walton College Undergraduate Programs Office of intent to pursue a minor. All requirements for the minor must be completed prior to the awarding of the student's undergraduate degree. All specific course prerequisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor. All upper level minor requirements must be taken in residence.

B.S.B.A./M.Acc.: Integrated Program

The integrated program to the Master of Accountancy is a five-year program of undergraduate and graduate coursework that allows outstanding students to earn the B.S.B.A. and the Master of Accountancy (M.Acc.) degrees at the same time. The professional curriculum, which usually begins in the student’s junior year, includes specially designed accounting courses taught in relatively small classes by full-time faculty members. Students accepted into the integrated degree program may concurrently enroll in undergraduate and graduate level courses.

Because M.Acc. graduates are expected to become leaders in the accounting profession, highly motivated students with the personal qualities and intellectual capacity to establish successful careers in public accounting, industry, not-for-profit organizations, and higher education are encouraged to apply.

Admission

Students are admitted to the integrated program according to the following
requirements. Admission is granted only for the fall semester; July 1 is the application deadline for those who wish to begin the integrated program the following fall. Students interested in this program must have completed 90 credit hours of study towards the baccalaureate degree (including ACCT 2013, ACCT 3533, ACCT 3613, ACCT 3723) by the July 1 deadline:

Acceptance into the integrated program is based upon the discretion of the admissions committee. The committee considers the overall quality of the applications including the overall grade point average, the grades in ACCT 2013, ACCT 3533, ACCT 3613, ACCT 3723 and the Graduate Management Admission Test (GMAT), as well as other relevant examples of academic ability and leadership. To receive serious consideration by the admissions committee, a student should have a minimum GPA of 3.0 within the applicant’s overall university and accounting coursework. Due to the demand for seats in the program, the admissions committee selectively restricts admission into the program based upon the availability of instructional resources. Students must complete at least two long-session semesters in residence in the M.Acc. program.

Transfer students will be handled on a case-by-case basis.

Satisfactory Progress

Students are expected to make continuous progress toward the degree by completing required accounting coursework each semester. Students who fail to meet the requirements for the M.Acc. program must choose another major of study or finalize their B.S.B.A. in Accounting. Students will be notified before this action is taken and should meet with an academic advisor in the Undergraduate Programs Office upon notification.

Probation

A student is placed on probation if his or her grade point average in core undergraduate accounting courses falls below 3.0.0. Except with the consent of the M.Acc. Program Director a student on probation may not take graduate accounting courses.

Graduation

To receive an integrated B.S.B.A/M.Acc. degree, a student must have a grade point average of at least 3.00 in all coursework taken as part of the minimum thirty-hour M.Acc. degree. He or she must also have a grade point average in graduate accounting coursework of at least 3.00.

Degree Requirements

The requirements of B.S.B.A/M.Acc. Integrated program are:

1. Undergraduate coursework
   a. Complete the requirements for the B.S.B.A. degree requirements and Accounting Major Requirements detailed above.
   b. Students are strongly encouraged, but not required, to participate in an accounting internship, ACCT 310V.

2. Graduate coursework

Students with appropriate backgrounds in business administration and economics and with an undergraduate concentration in accounting will be required to complete 30 semester hours of course work beyond the baccalaureate degree, at least 21 semester hours of which must be in courses reserved exclusively for graduate students.

All students must be enrolled for a minimum of 12 hours during consecutive fall/spring semesters. The student must be in residence a minimum of 24 weeks (see residency requirements of the Master of Arts/Master of Science).

A minimum of 18 semester hours of accounting are required, 12 hours of which are specified:

- ACCT 5413 Advanced Financial Accounting
- ACCT 5433 Fraud Prevention and Detection
- ACCT 5953 Auditing Standards
- ACCT 5873 Advanced Taxation

A minimum of six semester hours of the student’s graduate program must be non-accounting electives.

The M.Acc. degree program does not require a thesis. Successful completion of integrated B.S.B.A/M.Acc program from the University of Arkansas will qualify a student to take relevant professional examinations.

For further information, write to the M.Acc. Adviser, Department of Accounting, Walton College of Business, University of Arkansas, Fayetteville, AR 72701 or contact the Graduate School of Business at gsb@walton.uark.edu.

See Page 308 for Accounting (ACCT) courses
See Page 325 for Business Law (BLAW) courses.

---

**ECONOMICS (ECON)**

Gary D. Ferrier  
Department Chair, 402 WCOB, 479-575-ECON (3266)

**FACULTY**

- Lewis E. Epley Jr. Professorship in Economics and University Professor Ferrier
- University Professors Britton, Gay
- Margaret Gering and R.S. Martin, Jr. Chair in Business and Professor Farmer
- Professors Curington, Deck, Dixon, Horowitz, Ziegler
- CnocoPhillips Chair in International Economics and Business and Associate Professor Kali
- Associate Professors Mendez, Reyes
- Assistant Professors Civelli, Gu, Hao, Jahedi
- Clinical Associate Professor Stapp
- Clinical Assistant Professor Embaye
- Instructor Jensen (S.)

The department of economics offers two concentrations within the business economics major:

1) business economics
2) international economics and business.

The concentration in business economics is intended for those students who are interested primarily in business, but at the same time have a desire to understand the more advanced tools of economic analysis. Such a background is excellent preparation for careers in corporate research and planning, as well as careers with government and regulatory agencies, for graduate study in business and economics, and for law school. Students who want to pursue an advanced degree in business economics can, with appropriate planning, complete a master’s degree at the University of Arkansas within 12 months after receiving a B.S.B.A. degree. Please see the economics department chair for more information.

The international economics and business concentration is intended for students who wish to learn more about the international aspects of economics and business. It provides preparation for a broad range of careers in business, including management, marketing, and finance.

It is strongly recommended that economics majors who plan to continue their studies at the graduate level take at least two semesters of calculus (MATH 2554 and MATH 2564) and linear algebra (MATH 3083). These courses will substitute for the math courses required within Walton College core (MATH 2043 and MATH 2053).

**Business Economics Concentration**

The major in Business Economics requires 24 hours of major and collateral courses in the discipline as well as satisfying the other requirements for the B.S.B.A. degree. A maximum of 27 hours is allowed in a WCOB major or discipline field of study (i.e., core, major, electives) unless the extra courses are part of an interdisciplinary minor or collateral track. Se an adviser for selection of courses.

The courses required for the business economics concentration include those required in Walton College and Fullbright College. In addition, 15 hours of specified courses (listed below) are required:

- Complete the requirements for a B.S.B.A. degree as listed on page 208.
- **Total General Education** 60
- **Walton College Core Requirements** (See page 206) 33
- **Course Requirements in the concentration** 24
  - ECON 3033 Microeconomic Theory 3
  - ECON 3133 Macroeconomic Theory 3
  - ECON 4333 Economics of Organizations 3
  - ECON 4743 Intro. to Econometrics, or ECON 4753 Forecasting 3
  - Nine hours of ECON 3000/4000 9
During the eight-semester degree plan, course requirements for students are as follows:

**University Core**
- Total Degree Requirements: 126
- Total Walton College Requirements: 60

**Course Requirements in the concentration**
- 24 hours of major and collateral courses in the discipline as well as satisfying the other requirements for the B.S.B.A. degree.
- Maximum of 27 hours allowed in a Walton College of Business major or discipline course work in the J. William Fulbright College of Arts and Sciences pertaining to the United States to include any upper division course for American Studies (AMST) listed in the university catalog.
- International students may satisfy this requirement in one of two ways:
  1. For students who choose to take a third language, area studies require additional courses listed under EUST in the university catalog.
  2. For students who choose to take six hours of upper division English to satisfy their language requirement, 9 hours of upper division course work in the J. William Fulbright College of Arts and Sciences pertaining to the United States to include any upper division course for American Studies (AMST) listed in the university catalog.

**Junior- senior-level electives within Walton College**
- Maximum of 27 hours of ECON courses in department (core, major, elective). More than 27 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.

**Total Degree Requirements**
- 126

**Economics B.S.B.A. with Business Economics Concentration**

The major in International Economics requires 24 hours of major and collateral courses in the discipline as well as satisfying the other requirements for the B.S.B.A. degree. A maximum of 27 hours is allowed in a Walton College of Business major or discipline field of study (i.e., core, major, electives) unless the extra course is part of an interdisciplinary minor or collateral track. See an adviser for selection of courses. The courses required for the international economics and business concentration include those required in Walton College and Fulbright College. In addition, 24 hours of economics and business courses, six hours of a single foreign language at the intermediate level or above, and three hours at the upper-division level in business communications, or equivalent, in the same foreign language are specified, and nine hours of upper division courses in the Fulbright College in an area of study related to the foreign language studied.

Complete the requirements for a B.S.B.A. degree as listed on page 208.

**University Core**
- Hours
- 35

**Additional University Core**
- Hours
- 9

**Walton College Core Requirements**
- (See page 206)
- Hours
- 33

**Course Requirements in the concentration**
- Hours
- 24

**ECON 3033 Microeconomic Theory**
- Hours
- 3

**ECON 3133 Macroeconomic Theory**
- Hours
- 3

**ECON 4633 International Trade**
- Hours
- 3

**ECON 4643 International Macroeconomics and Finance**
- Hours
- 3

**ECON Electives or Collateral Courses**
- Hours
- 6

**Select two classes (six hours) from the following:**
- Hours
- 6

**FINN 3703 International Finance**
- Hours
- 3

**MGMT 4583 International Management**
- Hours
- 3

**MKTG 4633 Global Marketing**
- Hours
- 3

**SPCM 3643 International Transportation and Logistics**
- Hours
- 3

**ECON 3853 Emerging Markets**
- Hours
- 3

**ECON 3843 Economic Development, World Bank, and Multilateral Finance**
- Hours
- 3

**ECON 3933 The Japanese Economic System**
- Hours
- 3

**Foreign Language Requirements**
- Hours
- 9

Students whose native language is English or whose native language is not taught at the University of Arkansas must complete nine hours of university course work in a single foreign language — six hours of intermediate language and three hours of upper-division course work in communications and business language, or equivalent. Students who, on the basis of prior knowledge of language, elect one or both courses in the intermediate language sequence — at 2003 and 2013 level — may receive credit for outlined courses if they validate their higher placement by passing the business language course (or equivalent) with a grade of “C” or above. Students with no previous foreign language training or only rudimentary knowledge of a foreign language will be required to complete up to six hours of elementary language — at 1003 and 1013 level — in addition to the nine hours of language specified above.

Students may select one of the following language tracks:

- Arabic – ARAB 2013, ARAB 2016, ARAB 3016 or equivalent
- Chinese – CHIN 2003, CHIN 2013, CHIN 3033, and any other upper division CHIN
- French – FREN 2003, FREN 2013, FREN 4333, FREN 3033 or FREN 3003
- German – GERM 2003, GERM 2013, GERM 3003, and GERM 4333
- Italian – ITAL 2003, ITAL 2013, ITAL 3003, and ITAL 3013
- Japanese – JAPN 2003, JAPN 3003, and JAPN 3013
- Spanish – SPAN 2003, SPAN 3003, and SPAN 4333
- Students whose native language is not English but is taught at the University of Arkansas must select a third language from the list above, or substitute six hours of upper-division English language courses (i.e., speech, writing, or U.S. literature), to be selected with the consent of the department chair. Those students whose native language is not taught at the University of Arkansas will normally be required to select a third language.

**Area Studies Requirements**
- Students taking a foreign language, nine hours of upper-division course work in the J. William Fulbright College of Arts and Sciences are required. Domestic students can satisfy this requirement in one of three ways:
  1. any upper division foreign language course,
  2. minor in a foreign language, and/or
  3. select upper division courses related to the foreign language to include:

- Arabic – any upper division course for Middle Eastern Studies (MEST) to include MEST 4003, MEST 4003H or additional courses listed under MEST in the university catalog.
- Chinese Japanese Asian Studies – any upper division course for Asian Studies (AIST)
- French – any upper division course for EUST
- German – any upper division course for EUST
- Italian – any upper division course for EUST
- Spanish – any upper division course for Latin American Studies (LAST) or European Studies (EUST) to include LAST 4003, LAST 4003H, or additional courses listed under LAST in the university catalog, or EUST 399VH, EUST 4003, EUST 4003H, EUST 470V, or EUST 470VH or additional courses listed under EUST in the University catalog.

International students may satisfy this requirement in one of two ways:

1. For students who choose to take a third language, area studies requirements are the same as those for domestic students.
2. For students who choose to take six hours of upper division English to satisfy their language requirement, 9 hours of upper division course work in the J. William Fulbright College of Arts and Sciences pertaining to the United States to include any upper division course for American Studies (AMST) listed in the university catalog.

**Junior- senior-level electives within Walton College**
- Maximum of 27 hours of ECON courses in department (core, major, elective).
- More than 27 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.
- Hours
- 13

**Total Degree Requirements**
- Hours
- 126

(Total is more than the sum of the categories because some courses count for multiple requirements.)
Fall Semester Year 1
3 ENSL 1013 Composition I – University Core
3 MATH 2053 Finite Math – University Core
3 COMM 1313 Public Speaking
1 WCOB 1111 Freshman Business Connections
2 WCOB 1012 Legal Environment of Business *
0 WCOB 1120 Computer Competency Requirement
3 U.S. History or Political Science – University Core
15 Semester Hours

Spring Semester Year 1
3 ENSL 1023 Composition II - University Core
3 WCOB 1023 Business Foundations
3 WCOB 1033 Data Analysis and Interpretation
3 ECON 2023 Microeconomics – University Core
4 Natural Science – University Core
16 Semester Hours

Fall Semester Year 2
3 MATH 2043 Survey of Calculus **
3 ECON 2013 Macroeconomics ** - University Core
6 Select TWO of the following:
WCOB 2013 Markets and Consumers
WCOB 2023 Production and Delivery of Goods and Services
WCOB 2033 Acquiring and Managing Human Capital
WCOB 2043 Acquiring and Managing Financial Resources
3 Social Science – University Core
3 Fine Art/Humanities – University Core
18 Semester Hours

Spring Semester Year 2
3 Fine Art/Humanities – University Core
4 Natural Science – University Core
3 Business Social Science
6 Select TWO of the following not completed in previous semester:
WCOB 2013 Markets and Consumers
WCOB 2023 Production and Delivery of Goods and Services
WCOB 2033 Acquiring and Managing Human Capital
WCOB 2043 Acquiring and Managing Financial Resources
16 Semester Hours

ALL pre-business requirements should be met by end of term

Fall Semester Year 3
3 ECON 3033 Microeconomic Theory
3 ECON elective
6 WCOB 3016 Business Strategy and Planning
3 Junior Senior Business Elective
15 Semester hours

Spring Semester Year 3
3 ECON 3133 Macroeconomic Theory
3 ECON 4743 Introduction to Econometrics (or ECON 4753 Forecasting in Fall of Year 4)
6 Junior Senior Business Electives
3 General Education Elective
15 Semester hours

Fall Semester Year 4
3 ECON 4333 Economics of Organizations
3 ECON elective
3 Collateral Course
7 General Education Electives
16 Semester hours

Spring Semester Year 4
3 ECON elective
6 General Education Electives
6 Junior Senior Business Electives
15 Semester hours
126 Total hours

* Must be taken prior to fall semester of sophomore year
** Must be taken prior to fall semester of junior year

Economics B.S.B.A. with International Economics and Business Concentration
Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these course are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

Fall Semester Year 1
3 ENSL 1013 Composition I – University Core
3 MATH 2053 Finite Math – University Core
3 COMM 1313 Public Speaking
1 WCOB 1111 Freshman Business Connections
2 WCOB 1012 Legal Environment of Business *
0 WCOB 1120 Computer Competency Requirement
3 Intermediate Foreign Language I (2003 level)
15 Semester Hours

Spring Semester Year 1
3 ENSL 1023 Composition II - University Core
3 WCOB 1023 Business Foundations
3 WCOB 1033 Data Analysis and Interpretation
3 ECON 2023 Microeconomics – University Core
4 Intermediate Foreign Language II (2013 level)
16 Semester Hours

Fall Semester Year 2
3 MATH 2043 Survey of Calculus **
3 ECON 2013 Macroeconomics ** - University Core
6 Select TWO of the following:
WCOB 2013 Markets and Consumers
WCOB 2023 Production and Delivery of Goods and Services
WCOB 2033 Acquiring and Managing Human Capital
WCOB 2043 Acquiring and Managing Financial Resources
3 Social Science – University Core
3 U.S. History or Political Science
18 Semester Hours

Spring Semester Year 2
3 Fine Art/Humanities – University Core
4 Natural Science – University Core
3 Business Social Science
6 Select TWO of the following not completed in previous semester:
WCOB 2013 Markets and Consumers
WCOB 2023 Production and Delivery of Goods and Services
WCOB 2033 Acquiring and Managing Human Capital
WCOB 2043 Acquiring and Managing Financial Resources
3 Social Science – University Core
3 U.S. History or Political Science
18 Semester Hours

Fall Semester Year 3
3 ECON 3033 Microeconomic Theory
3 ECON or collateral elective
6 WCOB 3016 Business Strategy and Planning
3 Junior Senior Business Elective
15 Semester hours

Spring Semester Year 3
3 ECON 3133 Macroeconomic Theory
3 ECON 4633 International Trade Policy
3 Area Studies Course
3 Junior Senior Business Elective
3 General Education Elective
15 Semester hours

Fall Semester Year 4
3 ECON 4643 International Macroeconomics and Finance
3 International Economics/Business elective
3 Area Studies Course
1 General Education Elective
4 Natural Science – University Core
3 Junior Senior Business Elective
17 Semester hours

Spring Semester Year 4
3 International Economics/Business elective
3 ECON or collateral elective
### Finance Major Requirements with Concentrations

Complete the requirements for a B.S.B.A. degree as listed on page 208.

**Total General Education**
- 60 Hours

**Walton College Core Requirements** (See page 206)
- 33 Hours

**Course Requirements in the concentration**
- 24 Hours
  - FINN 3013 Financial Analysis and Valuation
  - FINN 3053 Financial Markets and Institutions
  - FINN 3703 International Finance

NOTE: These required courses represent a common body of knowledge for all finance majors and should be taken prior to coursework specified in concentrations within the major.

**Concentration I: Banking**
- 36 Hours
  - FINN 3103 Financial Modeling
  - FINN 3133 Commercial Banking
  - FINN 4313 Advanced Commercial Banking Finance

**Concentration II: Financial Management/Investment**
- 36 Hours
  - FINN 3103 Financial Modeling
  - Plus one of the following options (six hours):
    - **Option 1:** Any two of the four courses listed below
      - FINN 3603 Investments
      - FINN 3603 Corporate Finance
      - FINN 4133 Advanced Investments
      - FINN 4233 Advanced Corporate Finance
    - **Option 2:**
      - FINN 4143 Portfolio Management I
      - FINN 4153 Portfolio Management II
    - **Option 3:**
      - FINN 4163 Fixed Income Securities I
      - FINN 4173 Fixed Income Securities II

**Concentration III: Insurance**
- 30 Hours
  - FINN 3623 Risk Management
  - FINN 4733 Life/Health Insurance I
  - FINN 4833 Property/Casualty Insurance I

**Concentration IV: Real Estate**
- 30 Hours
  - FINN 3933 Real Estate Principles
  - FINN 4413 Real Estate Investment and Appraisal
  - FINN 4433 Real Estate Finance and Investment

**Concentration V: Personal Financial Management**
- 30 Hours
  - FINN 3003 Personal Financial Management
  - FINN 3063 Investments
  - FINN 3623 Risk Management
  - FINN 4013 Seminar in Financial Planning
  - FINN 4733 Life and Health Insurance I

The following courses are strongly recommended for the Personal Financial Management concentration and may be used toward the junior/senior business elective requirements:

**Accounting**
- ACCT 3723 Intermediate Accounting I
- ACCT 3753 Intermediate Accounting II
### Finance B.S.B.A. with Banking Concentration

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

#### Fall Semester Year 1
- **ENGL 1013 Composition I** – University Core
- **MATH 2053 Finite Math** – University Core
- **COMM 1313 Public Speaking**
- **WCOB 1111 Freshman Business Connections**
- **WCOB 1120 Computer Competency Requirement**
- **U.S. History or Political Science** – University Core

15 Semester Hours

#### Spring Semester Year 1
- **ENGL 1023 Composition II** – University Core
- **WCOB 1023 Business Foundations**
- **WCOB 1033 Data Analysis and Interpretation**
- **ECON 2023 Microeconomics** – University Core
- **Natural Science** – University Core

16 Semester Hours

#### Fall Semester Year 2
- **MATH 2043 Survey of Calculus**
- **ECON 2013 Macroeconomics** – University Core
- Select TWO of the following:
  - **WCOB 2013 Markets and Consumers**
  - **WCOB 2023 Production and Delivery of Goods and Services**
  - **WCOB 2033 Acquiring and Managing Human Capital**
  - **WCOB 2043 Acquiring and Managing Financial Resources**
  - **Social Science** – University Core
  - **Fine Art/Humanities** – University Core

18 Semester Hours

#### Spring Semester Year 2
- **Fine Art/Humanities** – University Core
- **Natural Science** – University Core
- **Business Social Science**
- Select TWO of the following not completed in previous semester:
  - **WCOB 2013 Markets and Consumers**
  - **WCOB 2023 Production and Delivery of Goods and Services**
  - **WCOB 2033 Acquiring and Managing Human Capital**
  - **WCOB 2043 Acquiring and Managing Financial Resource**

16 Semester Hours

### Fall Semester Year 3
- **FINN 3013 Financial Analysis**
- **FINN 3103 Financial Modeling**
- **WCOB 3016 Business Strategy and Planning**
- General Education Electives

16 Semester Hours

### Spring Semester Year 3
- **FINN 3053 Financial Markets and Institutions**
- **FINN 3133 Commercial Banking**
- Junior Senior Business Electives
- General Education Elective

15 Semester Hours

### Fall Semester Year 4
- **FINN 3701 International Finance**
- Finance or Interdisciplinary Electives
- Junior Senior Business Electives
- General Education Elective

15 Semester Hours

### Spring Semester Year 4
- **FINN 4313 Advanced Commercial Banking**
- Finance or Interdisciplinary Electives
- Junior Senior Business Elective
- General Education Electives

126 Total hours

* Must be taken prior to fall semester of sophomore year

** Must be taken prior to fall semester of junior year

### Finance B.S.B.A. with Financial Management and Investment Concentration

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

#### Fall Semester Year 1
- **ENGL 1013 Composition I** – University Core
- **MATH 2053 Finite Math** – University Core
- **COMM 1313 Public Speaking**
- **WCOB 1111 Freshman Business Connections**
- **WCOB 1120 Computer Competency Requirement**
- **U.S. History or Political Science** – University Core

15 Semester Hours

#### Spring Semester Year 1
- **ENGL 1023 Composition II** – University Core
- **WCOB 1023 Business Foundations**
- **WCOB 1033 Data Analysis and Interpretation**
- **ECON 2013 Macroeconomics** – University Core
- **Natural Science** – University Core

16 Semester Hours

#### Fall Semester Year 2
- **MATH 2043 Survey of Calculus**
- **ECON 2013 Macroeconomics** – University Core
- Select TWO of the following:
  - **WCOB 2013 Markets and Consumers**
  - **WCOB 2023 Production and Delivery of Goods and Services**
  - **WCOB 2033 Acquiring and Managing Human Capital**
  - **WCOB 2043 Acquiring and Managing Financial Resources**
  - **Social Science** – University Core
  - **Fine Art/Humanities** – University Core

18 Semester Hours

#### Spring Semester Year 2
- **Fine Art/Humanities** – University Core
- **Natural Science** – University Core
- **Business Social Science**
- Select TWO of the following not completed in previous semester:
  - **WCOB 2013 Markets and Consumers**
  - **WCOB 2023 Production and Delivery of Goods and Services**
  - **WCOB 2033 Acquiring and Managing Human Capital**
  - **WCOB 2043 Acquiring and Managing Financial Resource**

16 Semester Hours

### Fall Semester Year 3
- **Fine Art/Humanities** – University Core
- **Business Social Science**
- **Natural Science** – University Core
- Select TWO of the following not completed in previous semester:
  - **WCOB 2013 Markets and Consumers**
  - **WCOB 2023 Production and Delivery of Goods and Services**
### Finance B.S.B.A. with Insurance Concentration

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th>16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I – University Core</td>
<td></td>
</tr>
<tr>
<td>3 MATH 2053 Finite Math – University Core</td>
<td></td>
</tr>
<tr>
<td>3 COMM 1313 Public Speaking</td>
<td></td>
</tr>
<tr>
<td>1 WCOB 1111 Freshman Business Connections</td>
<td></td>
</tr>
<tr>
<td>0 WCOB 1102 Legal Environment of Business *</td>
<td></td>
</tr>
<tr>
<td>3 U.S. History or Political Science – University Core</td>
<td></td>
</tr>
<tr>
<td>15 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 1</th>
<th>16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1023 Composition II – University Core</td>
<td></td>
</tr>
<tr>
<td>3 WCOB 1023 Business Foundations</td>
<td></td>
</tr>
<tr>
<td>3 WCOB 1033 Data Analysis and Interpretation</td>
<td></td>
</tr>
<tr>
<td>3 ECON 2023 Microeconomics – University Core</td>
<td></td>
</tr>
<tr>
<td>4 Natural Science – University Core</td>
<td></td>
</tr>
<tr>
<td>16 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th>16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 MATH 2043 Survey of Calculus **</td>
<td></td>
</tr>
<tr>
<td>3 ECON 2013 Macroeconomics ** – University Core</td>
<td></td>
</tr>
<tr>
<td>6 Select TWO of the following:</td>
<td></td>
</tr>
<tr>
<td>WCOB 2013 Markets and Consumers</td>
<td></td>
</tr>
</tbody>
</table>

### Finance B.S.B.A. with Personal Financial Management Concentration

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th>16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1013 Composition I – University Core</td>
<td></td>
</tr>
<tr>
<td>3 MATH 2053 Finite Math – University Core</td>
<td></td>
</tr>
<tr>
<td>3 COMM 1313 Public Speaking</td>
<td></td>
</tr>
<tr>
<td>1 WCOB 1111 Freshman Business Connections</td>
<td></td>
</tr>
<tr>
<td>0 WCOB 1102 Legal Environment of Business *</td>
<td></td>
</tr>
<tr>
<td>3 U.S. History or Political Science – University Core</td>
<td></td>
</tr>
<tr>
<td>15 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 1</th>
<th>16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 1023 Composition II – University Core</td>
<td></td>
</tr>
<tr>
<td>3 WCOB 1023 Business Foundations</td>
<td></td>
</tr>
<tr>
<td>3 WCOB 1033 Data Analysis and Interpretation</td>
<td></td>
</tr>
<tr>
<td>3 ECON 2023 Microeconomics – University Core</td>
<td></td>
</tr>
<tr>
<td>4 Natural Science – University Core</td>
<td></td>
</tr>
<tr>
<td>16 Semester Hours</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th>16 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 MATH 2043 Survey of Calculus **</td>
<td></td>
</tr>
<tr>
<td>3 ECON 2013 Macroeconomics ** – University Core</td>
<td></td>
</tr>
<tr>
<td>6 Select TWO of the following:</td>
<td></td>
</tr>
<tr>
<td>WCOB 2013 Markets and Consumers</td>
<td></td>
</tr>
</tbody>
</table>
Fall Semester Year 2
3 MATH 2043 Survey of Calculus **
3 ECON 2013 Macroeconomics ** - University Core
3 WCOB 2043 Acquiring and Managing Financial Resources
3 Select ONE of the following:
   WCOB 2013 Markets and Consumers
   WCOB 2023 Production and Delivery of Goods and Services
   WCOB 2033 Acquiring and Managing Human Capital
3 Social Science – University Core
3 Fine Art/Humanities – University Core
18 Semester Hours

Spring Semester Year 2
3 Fine Art/Humanities – University Core
4 Natural Science – University Core
3 ACCT 2013 Accounting Principles
6 Select TWO of the following not completed in previous semester:
   WCOB 2013 Markets and Consumers
   WCOB 2023 Production and Delivery of Goods and Services
   WCOB 2033 Acquiring and Managing Human Capital
16 Semester Hours

Fall Semester Year 3
3 ACCT 3723 Intermediate Accounting I (Jr Sr Business elective)
3 FINN 3003 Personal Financial Management
3 FINN 3013 Financial Analysis
6 WCOB 3016 Business Strategy and Planning
15 Semester hours

Spring Semester Year 3
3 ACCT 3843 Fundamentals of Taxation (Jr Sr Business Elective)
3 FINN 3063 Principles of Investments
3 FINN 3623 Risk Management
3 General Education Elective
3 General Education Elective
15 Semester hours

Fall Semester Year 4
3 FINN 3703 International Finance
3 FINN 4733 Life and Health Insurance
3 Junior Senior Business Elective
3 Business Social Science
4 General Education Electives
16 Semester hours

Spring Semester Year 4
3 FINN 3053 Financial Markets and Institutions
3 FINN 4013 Seminar in Financial Planning
3 Junior Senior Business Elective
6 General Education Electives
15 Semester hours
126 Total hours

* Must be taken prior to fall semester of sophomore year
** Must be taken prior to fall semester of junior year
*** If a student selects Concentration V under Personal Financial Management, they must take ACCT 2013 as a junior/senior business elective in Spring of their sophomore year and ACCT 3723 in the Fall of their junior year.

Fall Semester Year 1
3 ENGL 1013 Composition I – University Core
3 MATH 2053 Finite Math – University Core
3 COMM 1313 Public Speaking
3

Spring Semester Year 1
3 ENGL 1023 Composition II - University Core
3 WCOB 1023 Business Foundations
3 WCOB 1033 Data Analysis and Interpretation
3 ECON 2023 Microeconomics – University Core
4 Natural Science – University Core
16 Semester Hours

Fall Semester Year 2
3 MATH 2043 Survey of Calculus **
3 ECON 2013 Macroeconomics ** - University Core
6 Select TWO of the following:
   WCOB 2013 Markets and Consumers
   WCOB 2023 Production and Delivery of Goods and Services
   WCOB 2033 Acquiring and Managing Human Capital
   WCOB 2043 Acquiring and Managing Financial Resources
3 Social Science – University Core
3 Fine Art/Humanities – University Core
18 Semester Hours

Spring Semester Year 2
3 Fine Art/Humanities – University Core
4 Natural Science – University Core
3 Business Social Science
6 Select TWO of the following not completed in previous semester:
   WCOB 2013 Markets and Consumers
   WCOB 2023 Production and Delivery of Goods and Services
   WCOB 2033 Acquiring and Managing Human Capital
   WCOB 2043 Acquiring and Managing Financial Resources
16 Semester Hours

Fall Semester Year 3
3 FINN 3013 Financial Analysis
3 FINN 3933 Real Estate Principles
6 WCOB 3016 Business Strategy and Planning
4 General Education Electives
16 Semester hours

Spring Semester Year 3
3 FINN 3053 Financial Markets and Institutions
3 FINN 4433 Real Estate Finance
6 Junior Senior Business Electives
3 General Education Elective
15 Semester hours

Fall Semester Year 4
3 FINN 3703 International Finance
3 FINN 4413 Real Estate Investment and Valuation
6 Junior Senior Business Electives
3 General Education Elective
15 Semester hours

Spring Semester Year 4
6 Finance or Interdisciplinary Elective
3 Junior Senior Business Elective
6 General Education Electives
15 Semester hours
126 Semester hours

* Must be taken prior to fall semester of sophomore year
** Must be taken prior to fall semester of junior year

Finance B.S.B.A. with Real Estate Concentration

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

Fall Semester Year 1
3 ENGL 1013 Composition I – University Core
3 MATH 2053 Finite Math – University Core
3 COMM 1313 Public Speaking

Spring Semester Year 1
3 WCOB 1111 Freshman Business Connections
2 WCOB 1012 Legal Environment of Business *
0 WCOB 1120 Computer Competency Requirement
3 U.S. History or Political Science – University Core
15 Semester Hours

Finance Minors for Business Students

The Department of Finance offers two minor options for Walton College students in the areas of Banking/Financial Management/Investment and Insurance/Real Estate. The minors require completion of 15 hours of study with all of the courses applied toward the minor taken in residence. The 15 hours include the following options and courses:

1. Banking/Financial Management/Investment
   Hours
   FINN 3013 Financial Analysis and Valuation 3
Plus two (six hours) of the following courses
FINN 3053 Financial Markets and Institutions
FINN 3103 Financial Modeling
FINN 3703 International Finance
Plus two (six hours) of the following courses
FINN 3063 Investments
FINN 3133 Commercial Banking
FINN 3603 Corporate Finance
FINN 4133 Advanced Investment
FINN 4233 Advanced Corporate Finance
FINN 4313 Advanced Commercial Banking
Total

2. Insurance/Real Estate
Choose any five classes (fifteen hours) of the following courses
FINN 3003 Personal Financial Management
FINN 3623 Risk Management
FINN 4733 Life and Health Insurance I
FINN 4833 Property and Casualty Insurance I
FINN 3933 Real Estate Principles
FINN 4413 Real Estate Investment and Appraisal
FINN 4433 Real Estate Finance
Total

Students who desire to earn a Finance minor must notify the Walton College Undergraduate Programs Office of their intent to pursue a minor. All requirements for a minor must be completed prior to the awarding of the student's undergraduate degree. All specific course prerequisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor.

See Page 354 for Finance (FINN) courses.

INFORMATION SYSTEMS (ISYS)

Rajiv Sabherwal
Department Chair, 204 WCOB, 479-575-4500

FACULTY
• University Professors Douglas, Jones (T.W.)
• M.D. Matthews Chair in Information Systems and Professor Cronan
• David D. Glass Chair in Information Systems and Distinguished Professor Davis (F.)
• Edwin and Karlee Bradberry and Professor Limayem
• Walton Professorship in Information Systems and Professor Sabherwal
• George and Boyce Billingsley Endowed Chair in Information Systems and Professor Venkatesh
• Assistant Professors Serrano, Setia, Sykes
• Instructors Bristow, McDaniel, Thompson
• Executive in Residence Mullins

The curriculum in information systems is designed to prepare graduates for careers in solving business problems with applications of computer technology. Graduates with a degree in Information Systems are sought by hundreds of companies for many different types of positions, such as programmer, analyst, database administrator, and web developer, among others. Graduates are now programming, analyzing and designing systems, consulting, teaching, and solving business problems across the country.

Information Systems Major Requirements

The major in Information Systems requires 24 hours of major and collateral courses in the discipline as well as satisfying the other requirements for the B.S.B.A. degree. A maximum of 27 hours is allowed in a WCOB major or discipline field of study (i.e., core, major, electives) unless the extra courses are part of an interdisciplinary minor. The Information Systems department encourages its majors to seek an interdisciplinary minor. See an adviser for selection of courses.

NOTE: Course requirements in the Information Systems major total 24 credit hours. Because of prerequisites, students should allow two full years (24 months) to complete this coursework. Prerequisites are strictly enforced.

Complete the requirements for a B.S.B.A. degree as listed on page 208. Programming I (CSCE 2003/2001L) is recommended as a general education elective.

Total General Education

Walton College Core Requirements (See page 206) 60
Course Requirements in the Major for All Concentrations 18
ISYS 2263 Introduction to Information Systems 3
ISYS 3293 System Analysis and Design 3
ISYS 3393 Business Applications Development Fundamentals 3
ISYS 4283 Business Database Systems 3
ISYS 4363 Business Project Development 3
WCOB 4213 ERP Fundamentals 3

Note: These required courses represent a common body of knowledge for all information systems majors. Majors must select one of the following concentrations and must complete six additional hours of coursework in the elected concentration.

Concentration I: Enterprise Resource Planning 6
WCOB 4223 ERP Configuration and Implementation 3
ISYS 4233 Seminar in ERP Development 3

Concentration II: Enterprise Systems 6
ISYS 4453 Introduction to Enterprise Servers 3
ISYS 4463 Enterprise Transaction Systems 3

Concentration III: IT Applications Management 6
ISYS 4243 Current Topics in Computer Information 3
ISYS 4373 Application Development with Java 3

Junior- senior-level electives or interdisciplinary minor within 15
Walton College
Maximum of 27 hours of ISYS courses in department (core, major, elective). More than 27 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.

Total Walton College Requirements 60
Total Degree Requirements 126

Information Systems B.S.B.A. with Enterprise Resource Planning Concentration

Eight-Semester Degree Program:

Students wishing to follow the eight-semester degree plan for Information Systems should see page 41 in the Academic Regulations chapter for university requirements of the program.

Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

Fall Semester Year 1
3 ENGL 1013 Composition I – University Core
3 MATH 2053 Finite Math – University Core
3 COMM 1313 Public Speaking
1 WCOB 1111 Freshman Business Connections
2 WCOB 1012 Legal Environment of Business *
0 WCOB 1120 Computer Competency Requirement
3 U.S. History or Political Science – University Core
15 Semester hours

Spring Semester Year 1
3 ENGL 1023 Composition II – University Core
3 WCOB 1023 Business Foundations
3 WCOB 1033 Data Analysis and Interpretation
3 ECON 2023 Microeconomics – University Core
### Fall Semester Year 1
- **ENGL 1023 Composition I** – University Core
- **MATH 2043 Survey of Calculus** **
- **ECON 2013 Macroeconomics** ** - University Core

### Fall Semester Year 2
- **MATH 2043 Survey of Calculus** **
- **ECON 2013 Macroeconomics** ** - University Core
- Select TWO of the following:
  - **WCOB 2013 Markets and Consumers**
  - **WCOB 2023 Production and Delivery of Goods and Services**
  - **WCOB 2033 Acquiring and Managing Human Capital**
  - **WCOB 2043 Acquiring and Managing Financial Resources**
  - **Fine Art/Humanities – University Core**
- **Social Science – University Core**

### Spring Semester Year 2
- **Fine Art/Humanities – University Core**
- **Natural Science – University Core**
- **ISYS 2263 Intro to Information Systems**
- Select TWO of the following not completed in previous semester:
  - **WCOB 2013 Markets and Consumers**
  - **WCOB 2023 Production and Delivery of Goods and Services**
  - **WCOB 2033 Acquiring and Managing Human Capital**
  - **WCOB 2043 Acquiring and Managing Financial Resources**

### Fall Semester Year 3
- **ISYS 3393 Business Application Development Fundamentals**
- **WCOB 4213 ERP Fundamentals**
- **Junior Senior Business Electives**
- **General Education Elective**

### Spring Semester Year 3
- **ISYS 4363 Business Project Development**
- **ISYS 4233 ERP Development**
- **General Education Electives**
- **Junior Senior Business Elective**

### Fall Semester Year 4
- **ISYS 4283 Business Database Systems**
- **WCOB 4223 ERP Configuration and Implementation**
- **General Education Electives**
- **Junior Senior Business Electives**

### Spring Semester Year 4
- **ISYS 4283 Centralized Database Systems**
- **ISYS 4453 Introduction to Enterprise Servers**
- **General Education Electives**
- **Junior Senior Business Elective**

### Total hours
- 126 Total hours
- **Must be taken prior to fall semester of sophomore year**
- **Must be taken prior to fall semester of junior year**

### Information Systems B.S.B.A. with Enterprise Systems Concentration

**Eight-Semester Degree Program:**

Students wishing to follow the eight-semester degree plan for Information Systems should see page 41 in the Academic Regulations chapter for university requirements of the program.

Courses in **BOLD** must be taken in the designated semester. Courses in **ITALIC** may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

### Fall Semester Year 1
- **ENGL 1013 Composition I** – University Core
- **MATH 2053 Finite Math** – University Core
- **COMM 1313 Public Speaking**
- **WCOB 1111 Freshman Business Connections**
- **WCOB 1012 Legal Environment of Business**
- **WCOB 1120 Computer Competency Requirement**
- **U.S. History or Political Science** – University Core

### Fall Semester Year 2
- **WCOB 2043 Acquiring and Managing Financial Resources**
- **WCOB 2033 Acquiring and Managing Human Capital**

### Fall Semester Year 3
- **WCOB 2023 Production and Delivery of Goods and Services**
- **WCOB 2013 Markets and Consumers**
- **WCOB 2043 Acquiring and Managing Financial Resources**

### Fall Semester Year 4
- **WCOB 2033 Acquiring and Managing Human Capital**
- **WCOB 2043 Acquiring and Managing Financial Resources**

### Spring Semester Year 2
- **ISYS 4463 Enterprise Transaction Systems**
- **ISYS 4363 Business Project Development**
- **ISYS 4453 Introduction to Enterprise Servers**
- **ISYS 3293 Systems Analysis and Design**
- **ISYS 3393 Business Application Development Fundamentals**
- **WCOB 4213 ERP Fundamentals**
- **General Education Elective**
- **Junior Senior Business Electives**
- **General Education Electives**
- **Junior Senior Business Elective**

### Total hours
- 126 Total hours
- **Must be taken prior to fall semester of sophomore year**
- **Must be taken prior to fall semester of junior year**

### Information Systems B.S.B.A. with IT Applications Concentration

**Eight-Semester Degree Program:**

Students wishing to follow the eight-semester degree plan for Information Systems should see page 41 in the Academic Regulations chapter for university requirements of the program.

Courses in **BOLD** must be taken in the designated semester. Courses in **ITALIC** may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

### Fall Semester Year 1
- **ENGL 1013 Composition I** – University Core
Students desiring more knowledge of information systems to assist them in their careers.

Spring Semester Year 1
3 ENGL 1023 Composition II – University Core
3 WCOB 1023 Business Foundations
3 WCOB 1033 Data Analysis and Interpretation
3 ECON 2023 Microeconomics – University Core
4 Natural Science – University Core
16 Semester hours

Fall Semester Year 2
3 MATH 2043 Survey of Calculus **
3 ECON 2013 Macroeconomics ** – University Core
6 Select TWO of the following:
   WCOB 2013 Markets and Consumers
   WCOB 2023 Production and Delivery of Goods and Services
   WCOB 2033 Acquiring and Managing Human Capital
   WCOB 2043 Acquiring and Managing Financial Resources
3 Fine Art/Humanities – University Core
3 Social Science – University Core
18 Semester hours

Spring Semester Year 2
3 Fine Art/Humanities – University Core
4 Natural Science – University Core
3 ISYS 2263 Intro to Information Systems
6 Select TWO of the following not completed in previous semester:
   WCOB 2013 Markets and Consumers
   WCOB 2023 Production and Delivery of Goods and Services
   WCOB 2033 Acquiring and Managing Human Capital
   WCOB 2043 Acquiring and Managing Financial Resources
3 ISYS 3393 Business Application Development Fundamentals
16 Semester hours

Fall Semester Year 3
3 ISYS 3293 Systems Analysis and Design
3 Junior/Senior Business Electives
6 WCOB 3016 Business Strategy and Planning
3 Business Social Science
15 Semester hours

Spring Semester Year 3
3 ISYS 3393 Business Application Development Fundamentals
3 WCOB 4213 ERP Fundamentals
6 Junior/Senior Business Electives
3 General Education Elective
15 Semester hours

Fall Semester Year 4
3 ISYS 4283 Centralized Database Systems
3 ISYS 4373 Application Development with Java
7 General Education Electives
3 Junior/Senior Business Electives
16 Semester hours

Spring Semester Year 4
3 ISYS 4243 Current Topics in Computer Information
3 ISYS 4363 Business Project Development
6 General Education Electives
3 Junior/Senior Business Elective
15 Semester hours
126 Total hours

* Must be taken prior to fall semester of sophomore year
** Must be taken prior to fall semester of junior year

Information Systems Minor for Business Students
The Department of Information Systems offers a minor for Walton College students desiring more knowledge of information systems to assist them in their careers. The minor requires completion of 15 hours of study with all of the courses applied toward the minor in residence. The 15 hours include the following courses:

- ISYS 2263 Introduction to Information Systems
- ISYS 3293 System Analysis and Design
- ISYS 3393 Business Application Development Fundamentals
- WCOB 4213 ERP Fundamentals

Plus one of the following:
- WCOB 4223 ERP Configuration and Implementation
- Any 3-hour Junior/Senior level ISYS course

Students who desire to earn an Information Systems minor must notify the Walton College Undergraduate Programs Office of intent to pursue a minor. All requirements for the minor must be completed prior to the awarding of the student's undergraduate degree. All specific course prerequisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor.

See Page 356 for Information Systems (ISYS) courses.

MANAGEMENT (MGMT)

Alan Ellstrand
Department Chair, 402 WCOB, 479-575-4566

FACULTY
- John H. Tyson Chair and Distinguished Professor in Management Gupta
- Raymond F. Orr Chair and Professor Delery
- Charles C. Fichtner and Professor Ellstrand
- Walton College Professorship in Sustainability and Professor Johnson
- William R. and Caicilia Howard Chair and Professor O’Leary-Kelly (A.)
- Cecil and Gwendolyn Cupp Applied Professorship in Entrepreneurship and Professor Reeves
- Professor Worrell
- Associate Professors Anand, Rosen
- Assistant Professors Breaux, Kish-Gephart
- Instructors Miles, Newman, Pullen

Management is the force responsible for directing organizations toward goals or objectives. Therefore, the management curriculum focuses on the nature and capabilities of human and other resources, as well as how the manager plans, organizes, staffs, coordinates, and evaluates those resources in an organization and its environment. The study of management prepares men and women for positions of leadership in profit and nonprofit organizations of all sizes. Management majors gain insight and skill needed for careers as professional managers or as self-employed entrepreneurs. These skills include technical knowledge, communicative capacity, human understanding, and conceptual and problem-solving ability. Two majors are offered in the management department: management and general business. Both majors are described below.

Management Major
Students may choose from among three concentrations: Human Resource Management, Small Business and Entrepreneurship, and Organizational Leadership. All management majors must complete MGMT 4243 Ethics and Corporate Responsibility. An additional 21 hours of credit are required for students majoring in management. Six of these credit hours are specified in the concentration. Beyond this, students can choose from specified management and non-management courses in order to complete the requirements for the major.

The Human Resource Management concentration is designed to prepare students for careers in human resource-related occupations. Among issues and areas addressed are management-employee relations, quality of work life, compensation and other reward systems, organizational staffing, and training and development. The Human Resource Management track emphasizes the importance of integrating individual goals and organizational objectives.

The Small Business and Entrepreneurship concentration is suggested for students who are interested in starting and/or operating a small business or independent company after graduation. The Small Business and Entrepreneurship track provides excellent
preparation for students wishing to obtain a highly integrated view of business operations. The Organizational Leadership concentration prepares new students for leadership positions within organizations. Among the topics explored are employee motivation, how to manage power and influence within organizations, developing effective teams, managing diversity, organizational transformation and change, and globalization.

Management Major Requirements

The major in management requires 24 hours of major and collateral courses in the discipline as well as satisfying the other requirements for the B.S.B.A. degree. A maximum of 27 hours is allowed in a WCOB major or discipline field of study (i.e., core, major, electives) unless the extra courses are part of an interdisciplinary minor or collateral track. See an adviser for selection of courses.

Complete the requirements for a B.S.B.A. degree as listed on page 208.

Total General Education

College Core Requirements

Courses Required

Concentration I: Human Resources Management

MGMT 4943 Organizational Staffing 3
MGMT 4953 Organizational Rewards and Compensation 3
MGMT 4243 Ethics and Corporate Responsibility 3
Select at least two classes (six hours) from the following courses: 6

MGMT 4253 Leadership
MGMT 4263 Organizational Change and Development
MGMT 3933 Entrepreneurship and New Venture Development
MGMT 4103 Special Topics
MGMT 4433 Small Enterprise Management
MGMT 4583 International Management
MGMT 4993 Entrepreneurship Practicum
Select up to three classes (nine hours) from the following courses: 9

ECON 3533 Labor Economics
ECON 4333 Economics of Organizations
ACCT 3613 Managerial Uses of Accounting Information
ISYS 2263 Introduction to Information Systems
MKTG 3633 Marketing Research
MKTG 4853 Marketing Management

Concentration II: Organizational Leadership

MGMT 4253 Leadership 3
MGMT 4263 Organizational Change and Development 3
MGMT 4243 Ethics and Corporate Responsibility 3
Select at least two classes (six hours) from the following courses: 6

MGMT 4933 Entrepreneurship and New Venture Development
MGMT 4103 Special Topics in Management
MGMT 4433 Small Enterprise Management
MGMT 4583 International Management
MGMT 4943 Organizational Staffing
MGMT 4953 Organizational Rewards and Compensation
MGMT 4993 Entrepreneurship Practicum
Select up to three classes (nine hours) from the following courses: 9

ACCT 3613 Managerial Uses of Accounting Information
ACCT 3723 Intermediate Accounting I
ISYS 2263 Introduction to Information Systems

Concentration III: Small Business and Entrepreneurship

Required courses:

MGMT 3933 Entrepreneurship and New Venture Development 3
MGMT 4243 Ethics and Corporate Responsibility 3
MGMT 4433 Small Enterprise Management 3
Select at least two classes (six hours) from the following courses: 6

MGMT 4103 Special Topics in Management
MGMT 4253 Leadership
MGMT 4263 Organizational Change and Development
MGMT 4433 Small Enterprise Management
MGMT 4583 International Management
MGMT 4943 Organizational Staffing
MGMT 4953 Organizational Rewards and Compensation
MGMT 4993 Entrepreneurship Practicum
Select up to three classes (nine hours) from the following courses: 9

ACCT 3613 Managerial Uses of Accounting Information
ACCT 3723 Intermediate Accounting I
ACCT 3843 Fundamentals of Taxation
BLAW 3033 Commercial Law
FINN 3053 Financial Markets and Institutions
FINN 3623 Risk Management
FINN 3933 Real Estate Principles
ISYS 2263 Introduction to Information Systems
MKTG 4233 Integrated Marketing Communications
MKTG 4343 Selling and Sales Management
MKTG 3553 Consumer Behavior
MKTG 4633 Global Marketing
MKTG 4433 Retail Strategy
SPCM 3613 Business Logistics
SPCM 3623 Purchasing and Inventory Systems
SPCM 4653 Transportation and Logistics Strategy

Junior- senior-level electives within Walton College 15

Maximum of 27 hours of MGMT courses in department (core, major, elective). More than 27 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.

Total College Requirements

Total Degree Requirements
Management B.S.B.A., Organizational Leadership Concentration

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program.

Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

**Fall Semester Year 1**
3  ENGL 1013 Composition I – University Core  
3  MATH 2053 Finite Math – University Core  
3  COMM 1313 Public Speaking  
1  WCOB 1111 Freshman Business Connections  
2  WCOB 1012 Legal Environment of Business *  
0  WCOB 1120 Computer Competency Requirement

**Fall Semester Year 2**
3  MATH 2043 Survey of Calculus **  
3  WCOB 2013 Markets and Consumers  
3  ECON 2013 Macroeconomics ** - University Core  
6  Select TWO of the following:  
WCOB 2013 Markets and Consumers  
WCOB 2023 Production and Delivery of Goods and Services  
WCOB 2033 Acquiring and Managing Human Capital  
WCOB 2043 Acquiring and Managing Financial Resources  
3  Social Science – University Core  
3  Fine Art/Humanities – University Core  
18  Semester Hours

**Spring Semester Year 2**
3  Fine Art/Humanities – University Core  
3  Natural Science – University Core  
3  Business Social Science  
6  Select TWO of the following completed in previous semester:  
WCOB 2013 Markets and Consumers  
WCOB 2023 Production and Delivery of Goods and Services  
WCOB 2033 Acquiring and Managing Human Capital  
WCOB 2043 Acquiring and Managing Financial Resources  
16  Semester Hours

**Fall Semester Year 3**
3  MGMT 4243 Ethics and Corporate Responsibility or MGMT 4953 Organizational Rewards  
3  MGMT 4943 Organizational Staffing  
6  WCOB 3016 Business Strategy and Planning  
3  Junior Senior Business Elective  
15  Semester hours

**Spring Semester Year 3**
3  MGMT 4953 Organizational Rewards and Compensation or MGMT 4943 Organizational Staffing  
6  MGMT or Collateral electives  
3  Junior Senior Business Elective  
3  General Education Elective  
15  Semester hours

**Fall Semester Year 4**
6  MGMT electives  
3  Junior Senior Business Elective  
7  General Education Electives  
16  Semester hours

**Spring Semester Year 4**
3  MGMT or collateral elective  
6  Junior Senior Business Electives  
6  General Education Electives  
15  Semester hours

126  Total hours

*  Must be taken prior to fall semester of sophomore year  
**  Must be taken prior to fall semester of junior year

Management B.S.B.A., Small Business and Entrepreneurship Concentration

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program.

Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

**Fall Semester Year 1**
3  ENGL 1013 Composition I – University Core  
3  MATH 2053 Finite Math – University Core  
3  COMM 1313 Public Speaking  
1  WCOB 1111 Freshman Business Connections  
2  WCOB 1012 Legal Environment of Business *  
0  WCOB 1120 Computer Competency Requirement
### Management Minor for Business Students

The Department of Management offers a minor for students desiring more knowledge of management to assist them in their careers. The minor requires completion of 15 hours of study with all of the courses applied toward the minor in residence. The 15 hours include the following courses:

- MGMT 4243 Ethics and Corporate Responsibility
- MGMT 3933 Entrepreneurship and New Venture Development
- MGMT 4103 Special Topics in Management

### General Business Major

General Business is the broadest major in Walton College. This program provides the student exposure to all facets of the business process. Maximum flexibility is retained by the student. At the same time, careful use of general and junior/senior business electives allows the student to concentrate additional coursework in one or more selected functional areas.

### General Business Major Requirements

Complete the requirements for a B.S.B.A. degree as listed on page 208.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total General Education</td>
<td>60</td>
</tr>
<tr>
<td>Walton College Core Requirements Core Requirements</td>
<td>33</td>
</tr>
</tbody>
</table>

Students must complete the following six hours of collateral courses:

- MKTG 3433 Introduction to Marketing Strategy
- ACCT 2013 Accounting Principles

### Course Requirements in the Major

Select one from each of the following seven groups. Sequencing of courses will be determined by choices made.

**Group 1**
- MGMT 3933 Entrepreneurship and New Venture Development
- MGMT 4243 Ethics and Corporate Responsibility
- MGMT 4253 Leadership
- MGMT 4263 Organizational Change and Development
- MGMT 4433 Small Enterprise Management
- MGMT 4943 Organizational Staffing
- MGMT 4953 Organizational Rewards and Compensation

**Group 2**
- ACCT 3533 Accounting Technology
- ACCT 3613 Managerial Uses of Accounting Information
- ACCT 3723 Intermediate Accounting I
- ACCT 3753 Intermediate Accounting II

**Group 3**
- WCOB 4213 ERP Fundamentals
- ISYS 2263 Introduction to Information Systems
- ISYS 4263 Information Technology Strategy
- ISYS 4933 Global Information Technology

**Group 4**
- ECON 3033 Microeconomic Theory
- ECON 3133 Macroeconomic Theory
- ECON 3533 Labor Economics
- ECON 4333 Economics of Organizations
- ECON 4633 International Trade
- ECON 4643 International Macroeconomics and Finance

**Group 5**
- FINN 3053 Financial Markets and Institutions

### Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCOB 1111</td>
<td>Freshman Business Connections</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 1102</td>
<td>Legal Environment of Business *</td>
<td>2</td>
</tr>
<tr>
<td>WCOB 1120</td>
<td>Computer Competency Requirement</td>
<td>0</td>
</tr>
<tr>
<td>U.S. History</td>
<td>History or Political Science – University Core</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

### Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCOB 2013</td>
<td>Markets and Consumers</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2023</td>
<td>Production and Delivery of Goods and Services</td>
<td>7</td>
</tr>
<tr>
<td>WCOB 2033</td>
<td>Acquiring and Managing Human Capital</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2043</td>
<td>Acquiring and Managing Financial Resources***</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

### Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCOB 2023</td>
<td>Production and Delivery of Goods and Services</td>
<td>7</td>
</tr>
<tr>
<td>WCOB 2033</td>
<td>Acquiring and Managing Human Capital</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2043</td>
<td>Acquiring and Managing Financial Resources***</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

### Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCOB 1012</td>
<td>Legal Environment of Business *</td>
<td>2</td>
</tr>
<tr>
<td>WCOB 1023</td>
<td>Business Foundations</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 1033</td>
<td>Data Analysis and Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2023</td>
<td>Microeconomics – University Core</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science</td>
<td>University Core</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester Hours</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

### Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 3933</td>
<td>Entrepreneurship and New Venture Development</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 4243</td>
<td>Ethics and Corporate Responsibility</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 3016</td>
<td>Business Strategy and Planning</td>
<td>6</td>
</tr>
<tr>
<td>Junior Senior Business Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

### Spring Semester Year 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 4433</td>
<td>Small Enterprise Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT or Collateral electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Junior Senior Business Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester hours</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

### Fall Semester Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Junior Senior Business Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Education Electives</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester hours</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

### Spring Semester Year 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT or collateral elective</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Junior Senior Business Elective</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>General Education Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total Semester hours</strong></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Total hours</strong></td>
<td>126</td>
</tr>
</tbody>
</table>

* Must be taken prior to fall semester of sophomore year

** Must be taken prior to fall semester of junior year
FINN 3063 Investments  
FINN 3623 Risk Management  
FINN 4233 Advanced Corporate Finance

**Group 6**  
MKTG 4233 Integrated Marketing Communications  
MKTG 3553 Consumer Behavior  
MKTG 4453 Retail Strategy  
Six hours 3000/4000 business courses

**Group 7**  
SPCM 3443 Principles of Transportation  
SPCM 3613 Business Logistics  
SPCM 3623 Purchasing and Inventory Systems  
SPCM 3643 International Transportation and Logistics  
SPCM 4633 Transportation Carrier Management  
SPCM 4653 Transportation and Logistics Strategy

**Junior- Senior-level electives within Walton College**

Maximum of 27 hours of courses in any one department (core, major, elective). More than 27 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.

**Total Walton College Requirements**

60

**Total Degree Requirements**

126

---

**General Business B.S.B.A. Eight-Semester Degree Program:**

Students wishing to follow the eight semester degree plan for General Business should see page 41 in the Academic Regulations chapter for university requirements of the program.

Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

### Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1013 Composition I - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 2053 Finite Math - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMM 1313 Public Speaking</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 1111 Freshman Business Connections</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>WCOB 1012 Legal Environment of Business *</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>WCOB 1120 Computer Competency Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>U.S. History or Political Science - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

### Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1023 Composition II - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 1023 Business Foundations</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 1033 Data Analysis and Interpretation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 2033 Microeconomics - University Core</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

### Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043 Survey of Calculus ** - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 2013 Macroeconomics ** - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2043 Acquiring and Managing Financial Resources</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select ONE of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Markets and Consumers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Production and Delivery of Goods and Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Science - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Fine Art/Humanities - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

### Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Art/Humanities - University Core</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Natural Science - University Core</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ACCT 13 Accounting Principles (Collateral Course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Select TWO of the following not completed in previous semester:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Markets and Consumers</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2023 Production and Delivery of Goods and Services</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WCOB 2043 Acquiring and Managing Financial Resources</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Semester Hours</td>
</tr>
</tbody>
</table>

---

**ALL pre-business requirements should be met by end of term**

### Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>Group 1 course (see above)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Group 2 course (see above)</td>
</tr>
<tr>
<td>WCOB 3016 Business Strategy and Planning</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>MKTG 3433 Intro to Marketing Strategy (Collateral Course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Semester hours</td>
</tr>
</tbody>
</table>

### Spring Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>Group 3 course (see above)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Group 6 course (see above)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Junior Senior Business Elective</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Business Social Science</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>General Education Elective</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Semester hours</td>
</tr>
</tbody>
</table>

### Fall Semester Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>Group 5 course (see above)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Junior Senior Business Elective</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Group 7 course (see above)</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>General Education Electives</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Semester hours</td>
</tr>
</tbody>
</table>

### Spring Semester Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>Group 4 course (see above)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>General Education Electives</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Junior Senior Business Elective</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Semester hours</td>
</tr>
</tbody>
</table>

| Total hours                                                          | 126    |

See Page 383 for Management (MGMT) courses.

---

**MARKETING (MKTG)**

Jeff B. Murray,  
Department Chair, 302 WCOB, 479-575-4055

**FACULTY**

- Wal-Mart Chair of Marketing and Distinguished Professor Burton  
- Wal-Mart Lecturer in Retailing and Professor Jensen (T.)  
- Sam M. Walton Leadership Chair and Professor Jones (E.)  
- R.A. and Vivian Young Chair and Professor Murray  
- Professor Howlett  
- Associate Professors Ashton, Kopp, Rapert, Stassen  
- Assistant Professors Keling, Smith (R.), Soster  
- Clinical Associate Professor Jensen (M.)  
- Instructors Cole, Cox

The department of marketing offers two majors:  
1) Marketing  
2) Retail, and

Descriptions of the marketing major and courses follow. The retail major is described in the next section.

**Marketing Major**

The major in marketing requires 24 hours of major and collateral courses in the discipline as well as satisfying the other requirements for the B.S.B.A. degree. A maximum of 27 hours is allowed in a WCOB major or discipline field of study (i.e., core, major, electives) unless the extra courses are part of an interdisciplinary minor or collateral track. See an adviser for selection of courses.

The major in marketing is designed to prepare students for careers involving product planning, distribution, promotion, and pricing strategies in profit or nonprofit organiz-
tions. In addition to a broad overview of the marketing functions within organizations, students are provided with knowledge and skills in consumer behavior, marketing research, and strategic marketing.

Students majoring in marketing are actively subjected to problem-solving situations, both domestic and international, where a variety of contemporary tools are employed to stimulate the strategic decision-making process. Supportive disciplines with which the marketer should be familiar include psychology, sociology, accounting, economics, statistics, quantitative analysis, and research methodology.

The marketing major is intended to provide students with broad knowledge and skills in marketing applicable to a wide range of profit and nonprofit organizations.

### Marketing Major Requirements

Complete the requirements for a B.S.B.A. degree as listed on page 208.

**Total General Education** 60

**Walton College Core Requirements** (See page 206) 33

**Course Requirements** 24

- MKTG 3433 Introduction to Marketing Strategy
- MKTG 3553 Consumer Behavior
- MKTG 3633 Marketing Research
- MKTG 4853 Marketing Management

Select twelve hours from the following:

- MKTG 4233 Integrated Marketing Communications
- MKTG 4343 Selling and Sales Management
- MKTG 4103 Marketing Topics
- MKTG 4633 Global Marketing
- MKTG 4433 Retail Strategy
- MKTG 4443 Retail Buying and Merchandise

**Junior- Senior-level electives within Walton College** 15

Maximum of 27 hours of MKTG courses in department (core, major, elective). More than 27 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.

**Total Walton College Requirements** 60

**Total Degree Requirements** 126

### Marketing B.S.B.A.

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in **BOLD** must be taken in the designated semester. Courses in **ITALIC** may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

#### Fall Semester Year 1

1. **ENGL 1013** Composition I** – University Core
2. **MATH 2053** Finite Math – University Core
3. **COMM 1313** Public Speaking
4. **WCOB 1111** Freshman Business Connections
5. **WCOB 1012** Legal Environment of Business
6. **WCOB 1120** Computer Competency Requirement
7. **U.S. History or Political Science** – University Core

**15 Semester Hours**

#### Spring Semester Year 1

1. **ENGL 1023** Composition II** – University Core
2. **WCOB 1023** Business Foundations
3. **WCOB 1033** Data Analysis and Interpretation
4. **ECON 2023** Microeconomics – University Core
5. **Natural Science** – University Core

**16 Semester Hours**

#### Fall Semester Year 2

1. **MATH 2043** Survey of Calculus **
2. **ECON 2023** Macroeconomics ** – University Core
3. **WCOB 2013** Markets and Consumers
4. **WCOB 2023** Production and Delivery of Goods and Services
5. **See Page 384 for Marketing (MKTG) Courses**

**16 Semester Hours**

### Marketing Minor for Business Students

The Department of Marketing offers a minor for Walton College students desiring more knowledge of marketing to assist them in their careers. The minor requires the completion of 15 hours of study with all of the courses applied toward the minor taken in residence. The 15 hours include the following courses:

- MKTG 3433 Introduction to Marketing Strategy
- MKTG 3553 Consumer Behavior
- MKTG 4233 Integrated Marketing Communications
- MKTG 4343 Selling and Sales Management
- MKTG 3633 Marketing Research
- MKTG 4633 Global Marketing
- MKTG 4433 Retail Strategy
- MKTG 4443 Retail Buying and Merchandising

Students who desire to earn a Marketing minor must notify the Walton College Undergraduate Programs Office of intent to pursue a minor. All requirements for the minor must be completed prior to the awarding of the student's undergraduate degree. All specific course pre-requisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor. All upper level minor requirements must be taken in residence.

**See Page 384 for Marketing (MKTG) Courses**
Retail Major

The retail major requires 24 hours of major and collateral courses in the discipline as well as satisfying the other requirements for the B.S.B.A. degree. A maximum of 27 hours is allowed in a WCOB major or discipline field of study (i.e., core, major, electives) unless the extra courses are part of an interdisciplinary minor or collateral track. See an adviser for selection of courses.

The major in retail is designed to prepare students for careers in retailing or in companies that manufacture, sell, and distribute consumer goods to retailers. In addition to a broad view of the business and retail environments students can select to concentrate their retail studies in accounting, economics, finance, information systems, international retail, management, marketing, or supply chain management. A general retail concentration is also available.

Retail Major Requirements

Complete the requirements for a B.S.B.A. degree as listed on page 208.

Total General Education

60

Walton College Core Requirements (See page 206)

33

Course Requirements in All Concentrations

24

- MKTG 3433 Introduction to Marketing Strategy
- MKTG 3553 Consumer Behavior
- MKTG 4433 Retail Strategy
- MKTG 4443 Retail Buying and Merchandise

Select twelve hours from a single concentration:

Accounting Concentration (12 hours)
- ACCT 2013 Accounting Principles
- ACCT 3613 Managerial Use of Accounting Info
- ACCT 3723 Intermediate Accounting I
- ACCT 4673 Product, Project and Service Costing

Economics Concentration (12 hours)
- ECON 3033 Microeconomic Theory
- ECON 3133 Macroeconomic Theory
- ECON 4333 Economics of Organizations
- ECON 4633 International Trade
- ECON 4643 International Macroeconomics and Finance

Finance Concentration (12 hours)
- FINN 3013 Financial Analysis and Valuation
- FINN 3053 Financial Markets and Institutions
- FINN 3603 Corporate Finance
- FINN 3623 Risk Management
- FINN 3703 International Finance
- FINN 3933 Real Estate Principles
- FINN 4833 Property/Casualty Ins. I

Information Systems Concentration (12 hours)
- ISYS 2263 Introduction to Information Systems
- ISYS 4243 Current Topics in Computer Information
- WCOB 4213 ERP Fundamentals

Management Concentration (12 hours)
- MGMT 4243 Ethics and Corporate Responsibility
- MGMT 4253 Leadership
- MGMT 4263 Organizational Change and Development
- MGMT 4943 Organizational Staffing

Marketing Concentration (12 hours)
- MKTG 4333 Selling and Sales Management
- MKTG 4633 Global Marketing
- MKTG 4853 Marketing Management
- MKTG 4863 Customer Management
- MKTG 4873 Marketing Research

Supply Chain Management Concentration (12 hours)
- SPCM 3443 Principles of Transportation
- SPCM 3613 Business Logistics
- SPCM 3623 Purchasing and Inventory Systems
- SPCM 3643 International Transportation and Logistics
- SPCM 4633 Transportation Carrier Management

General Retail Concentration (12 hours)
- Select 1 course from each of 4 different areas
  - Accounting
    - ACCT 2013 Accounting Principles
  - Economics
    - ECON 3033 Microeconomic Theory
  - Finance
    - FINN 3013 Financial Analysis and Valuation
  - Information Systems
    - ISYS 2263 Introduction to Information Systems

Junior- senior-level electives within Walton College

15

Maximum of 27 hours of MKTG courses in department (core, major, elective). More than 27 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.

Total Walton College Requirements

60

Total Degree Requirements

126
Retail B.S.B.A.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 41 in the Academic Regulations chapter for university requirements of the program. Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1013 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2053 Finite Math</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1313 Public Speaking</td>
<td>1</td>
</tr>
<tr>
<td>WCOB 1111 Freshman Business Connections</td>
<td>2</td>
</tr>
<tr>
<td>WCOB 1012 Legal Environment of Business *</td>
<td>0</td>
</tr>
<tr>
<td>WCOB 1120 Computer Competency Requirement</td>
<td>3</td>
</tr>
<tr>
<td>U.S. History or Political Science – University Core</td>
<td>3</td>
</tr>
</tbody>
</table>

15 Semester Hours

Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043 Acquiring and Managing Financial Resources</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 2023 Production and Delivery of Goods and Services</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 4213 ERP Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>Junior Senior Business Elective</td>
<td>3</td>
</tr>
<tr>
<td>Retail Concentration</td>
<td>3</td>
</tr>
</tbody>
</table>

15 Semester Hours

Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2043 Survey of Calculus **</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2013 Macroeconomics ** - University Core</td>
<td>3</td>
</tr>
<tr>
<td>Select TWO of the following:</td>
<td>6</td>
</tr>
<tr>
<td>WCOB 2013 Markets and Consumers</td>
<td></td>
</tr>
<tr>
<td>WCOB 2023 Production and Delivery of Goods and Services</td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital</td>
<td></td>
</tr>
<tr>
<td>WCOB 2043 Acquiring and Managing Financial Resources</td>
<td></td>
</tr>
</tbody>
</table>

16 Semester Hours

Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Art/Humanities – University Core</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science – University Core</td>
<td>3</td>
</tr>
<tr>
<td>Business Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Select TWO of the following:</td>
<td>6</td>
</tr>
<tr>
<td>WCOB 2013 Markets and Consumers</td>
<td></td>
</tr>
<tr>
<td>WCOB 2023 Production and Delivery of Goods and Services</td>
<td></td>
</tr>
<tr>
<td>WCOB 2033 Acquiring and Managing Human Capital</td>
<td></td>
</tr>
<tr>
<td>WCOB 2043 Acquiring and Managing Financial Resources</td>
<td></td>
</tr>
</tbody>
</table>

16 Semester Hours

All pre-business requirements should be met by end of term

Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 3433 Introduction to Marketing Strategy</td>
<td>3</td>
</tr>
<tr>
<td>WCOB 3016 Business Strategy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>Retail Concentration</td>
<td>3</td>
</tr>
<tr>
<td>Junior Senior Business Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

15 Semester hours

Spring Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 3553 Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 4433 Retail Strategy</td>
<td>3</td>
</tr>
<tr>
<td>Retail Concentration</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

15 Semester hours

Fall Semester Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 4443 Retail Buying and Merchandise</td>
<td>3</td>
</tr>
<tr>
<td>Junior Senior Business Elective</td>
<td>3</td>
</tr>
<tr>
<td>General Education Electives</td>
<td>7</td>
</tr>
<tr>
<td>Semester hours</td>
<td>16</td>
</tr>
</tbody>
</table>

Spring Semester Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Concentration</td>
<td>3</td>
</tr>
<tr>
<td>Junior Senior Business Elective</td>
<td>6</td>
</tr>
</tbody>
</table>

6 General Education Electives
15 Semester hours
126 Total hours

* Must be taken prior to fall semester of sophomore year
** Must be taken prior to fall semester of junior year

Retail Minor for Business Students

The Department of Marketing offers a retail minor for Walton College students desiring more knowledge of retail, to assist them in their careers. The minor requires the completion of 15 hours of study with all of the courses applied toward the minor taken in residence.

The 15 hours include the following courses:

- MKTG 3433 Introduction to Marketing Strategy
- MKTG 3553 Consumer Behavior
- MKTG 4433 Retail Strategy
- MKTG 4443 Retail Buying and Merchandising

Plus 3 hours from the following courses:

- ACCT 2013 Accounting Principles
- ECON – any ECON at the 3000 or 4000 level
- FINN 3013 Financial Analysis and Valuation
- MGMT - any MGMT at the 3000 or 4000 level
- MKTG 4233 Integrated Marketing Communications
- SPCM 3613 Business Logistics
- WCOB 4213 ERP Fundamentals

Students who desire to earn a retail minor must notify the Walton College Undergraduate Programs Office of intent to pursue a minor. All requirements for the minor must be completed prior to the awarding of the student's undergraduate degree. All specific course prerequisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor. All upper level minor requirements must be taken in residence.

See Page 384 for Marketing (MKTG) courses.

SUPPLY CHAIN MANAGEMENT

Matthew Waller
Department Chair, 401 WCOB, 479-575-4051

FACULTY
- Garrison Chair in Supply Chain Management and Professor Waller
- Oren Harris Chair of Transportation and Professor Ozment
- Associate Professors Aloysius, Hofer (C.)
- Assistant Professors Hofer (A.), Williams (B.)
- Clinical Assistant Professor Hyatt
- Instructor Shook

Supply Chain Management Major

The major in supply chain management is designed to prepare students for careers in carrier management and logistics management. Carrier management is the management of the domestic and international modes of transportation. Logistic management applies analytical techniques and uses the systems approach in managing the flow of materials into and through the production and manufacturing processes of a firm to its customers.

Basic employment opportunities exist in marketing, sales, and operations positions with carriers in all transportation modes, and in positions with shippers having responsibility in one or more of the areas under logistics management, warehousing, packaging, and materials handling. Opportunities also exist in governmental agencies.

Supply Chain Management Major Requirements

Complete the requirements for a B.S.B.A. degree as listed on page 208.

Total General Education 60
Walton College Core Requirements (See page 206) 33
Course Requirements in the Major 24
SPCM 3443 Principles of Transportation 3
SPCM 3613 Business Logistics 3
SPCM 3623 Purchasing and Inventory Systems 3
SPCM 3643 International Transportation and Logistics 3
SPCM 4633 Transportation Carrier Management 3
SPCM 4653 Transportation and Logistics Strategy 3
Plus two classes (six hours) from a single area: 6

Information Systems:
ISYS 2263 Introduction to Information Systems
ISYS 3293 System Analysis and Design
ISYS 4243 Current Topics in Computer Information
ISYS 4293 Business Intelligence
WCOB 4213 ERP Fundamentals

Marketing:
MKTG 4433 Selling and Sales Management
MKTG 3633 Marketing Research
MKTG 4633 Global Marketing
MKTG 4443 Retail Strategy

International:
ECON 4633 International Trade Policy
ECON 4643 International Macroeconomics and Finance
FINN 3703 International Finance
MGMT 4853 International Management

Junior- senor-level electives within Walton College 15

Maximum of 27 hours of SPCM courses in department (core, major, elective).
More than 27 hours allowed if the extra courses are part of interdisciplinary minor or collateral track.
Total Walton College Requirements 60
Total Degree Requirements 126

Supply Chain Management B.S.B.A.
Eight-Semester Degree Program:
Students wishing to follow the eight-semester degree plan for Supply Chain Management should see page 41 in the Academic Regulations chapter for university requirements of the program.
Courses in BOLD must be taken in the designated semester. Courses in ITALIC may be taken in varied sequences as long as other designated requirements for these courses are met. Although other courses listed are not required to be completed in the designated sequence, the recommendations below are preferred.

Fall Semester Year 1
3 ENGL 1013 Composition I – University Core
3 MATH 2053 Finite Math – University Core
3 COMM 1313 Public Speaking
1 WCOB 1111 Freshman Business Connections
2 WCOB 1012 Legal Environment of Business *
0 WCOB 1120 Computer Competency Requirement
3 U.S. History or Political Science – University Core
15 Semester Hours

Spring Semester Year 1
3 ENGL 1023 Composition II – University Core
3 WCOB 1023 Business Foundations
3 WCOB 1033 Data Analysis and Interpretation
3 ECON 2023 Microeconomics – University Core
4 Natural Science – University Core
16 Semester Hours

Fall Semester Year 2
3 MATH 2043 Survey of Calculus **
3 ECON 2013 Macroeconomics ** - University Core
6 Select TWO of the following:
WCOB 2013 Markets and Consumers
WCOB 2023 Production and Delivery of Goods and Services
WCOB 2043 Acquiring and Managing Financial Resources

WCOB 2043 Acquiring and Managing Financial Resources 3
Social Science – University Core 3
Fine Art/Humanities – University Core 3
18 Semester Hours

Spring Semester Year 2
3 Fine Art/Humanities – University Core 3
Natural Science – University Core 3
Business Social Science 3
6 Select TWO of the following not completed in previous semester:
WCOB 2013 Markets and Consumers
WCOB 2023 Production and Delivery of Goods and Services
WCOB 2043 Acquiring and Managing Human Capital
WCOB 2043 Acquiring and Managing Financial Resources 16 Semester Hours

ALL pre-business requirements should be met by end of term

Fall Semester Year 3
3 SPCM 3443 Principles of Transportation
3 SPCM 3613 Business Logistics
3 Collateral from a single area
6 WCOB 3016 Business Strategy and Planning 15 Semester hours

Spring Semester Year 3
3 Collateral from a single area
9 Junior Senior Business Electives
4 General Education Electives
ad16 Semester hours

Fall Semester Year 4
3 SPCM 3623 Purchasing and Inventory Systems
3 SPCM 4633 Transportation Carrier Management
6 General Education Electives
3 Junior Senior Business Elective
15 Semester hours

Spring Semester Year 4
3 SPCM 3643 International Transportation and Logistics
3 SPCM 4653 Transportation and Logistics Strategy
6 General Education Electives
15 Semester hours
126 Total hours

* Must be taken prior to fall semester of sophomore year
** Must be taken prior to fall semester of junior year

Supply Chain Management Minor for Business Students
The Department of Supply Chain Management offers a minor for Walton College students desiring more knowledge of supply chain management to assist them in their careers. The minor requires the completion of 15 hours of study with all of the courses applied toward the minor taken in residence. The 15 hours include the following courses:

SPCM 3443 Principles of Transportation
SPCM 3613 Business Logistics
SPCM 3623 Purchasing and Inventory Systems
SPCM 3643 International Transportation and Logistics
SPCM 4633 Transportation Carrier Management

Students who desire to earn a Supply Chain Management minor must notify the Walton College Undergraduate Programs Office of intent to pursue a minor. All requirements for the minor must be completed prior to the awarding of the student’s undergraduate degree. All specific course prerequisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor. All upper level minor requirements must be taken in residence.

See Page 405 for Supply Chain Management (SPCM) courses.
The following programs are interdisciplinary and not attached to a specific department in Walton College. Similarly, WCOB courses are interdisciplinary and not assigned to a specific department either.

**Enterprise Resource Planning Minor**

The Walton College offers an interdisciplinary minor in Enterprise Resource Planning (ERP). ERP systems are large-scale programs, which are used by many large companies to integrate their business processes and run the organization using primarily one software system. The minor requires completion of 15 hours of study with all of the courses applied toward the minor taken in residence. The 15 hours include:

- WCOB 4213 ERP Fundamentals
- WCOB 4223 ERP Configuration and Implementation
- Plus nine hours from the following courses:
  - ACCT 3533 Accounting Technology
  - ACCT 3723 Intermediate Accounting I
  - ISYS 4233 Seminar in ERP Development
  - SPCM 3443 Principles of Transportation
  - SPCM 3613 Business Logistics
  - SPCM 3623 Purchasing and Inventory Systems

Students who desire to earn an Enterprise Resource Planning minor must notify the Walton College Undergraduate Programs Office of intent to pursue a minor. All requirements for the minor must be completed prior to the awarding of the student's undergraduate degree. All specific course prerequisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor. All upper level minor requirements must be taken in residence.

**Financial Economics Minor**

The Walton College offers an interdisciplinary minor in Financial Economics. The minor will provide students with the background needed for research in finance and industry. The minor requires completion of 15 hours of study with all of the courses applied toward the minor taken in residence. The 15 hours include:

- FINN 3013 Financial Analysis
- ECON 4753 Forecasting (Applied Time Series)
- Plus nine hours from the following courses:
  - FINN 3063 Investments
  - FINN 3603 Corporate Finance
  - ECON 3433 Money and Banking
  - ECON 4743 Intro. to Econometrics

Students who desire to earn a Financial Economics minor must notify the Walton College Undergraduate Programs Office of intent to pursue a minor. All requirements for the minor must be completed prior to the awarding of the student's undergraduate degree. All specific course prerequisites must be met. Each student must have a 2.00 cumulative grade-point average in the courses offered for the minor. All upper level minor requirements must be taken in residence.

See Page 406 for Walton College of Business (WCOB) courses.
College of Education and Health Professions

Mission and Objectives

The mission of the College of Education and Health Professions is to enhance the quality of life of the citizens of Arkansas, the nation, and the world through the development of scholar-practitioners in education, health, and human services. The vision of the college is to become a nationally competitive, student-centered research college serving Arkansas and the world.

The goals of the College of Education and Health Professions are as follows:

- Strengthen the academic quality and reputation of the college by developing and enhancing programs of excellence in teaching, research, and service.
- Improve the quality and diversity of our students, faculty, and staff, and increase the size of our student enrollment.
- Generate increased private and public support for the college’s research, academic, and service initiatives.

Facilities and Resources

The Sylvia Hack Boyer Center for Student Services

The Boyer Center for Student Services is the office dedicated to meeting student needs—putting students first! The office houses the Office of Field Placement, Licensure Services, and Student Assessment (including the Chalk and Wire helpdesk). The Center also provides support to the academic departments as they pursue state and national accreditation.

Organization

For administrative purposes, the undergraduate programs of the college are organized under four academic units, with majors shown after each unit:

1. Curriculum and Instruction
   - Career and Technical Education
   - Childhood Education
   - Elementary Education
2. Eleanor Mann School of Nursing
   - Nursing
3. Health, Human Performance and Recreation
   - Community Health Promotion
   - Kinesiology
   - Recreation and Sport Management
4. Rehabilitation, Human Resources, and Communication Disorders
   - Communication Disorders
   - Human Resource Development

Facilities

The Graduate Education Building, Peabody Hall and the Health, Physical Education and Recreation Building serve as the nucleus of the College of Education and Health Profession’s activities. An auditorium, several conference and seminar rooms, classrooms, and offices for individual professors, along with administrative and service units such as dean, associate dean for administration, associate and assistant deans for academic affairs, the Sylvia Hack Boyer Center for Student Services, and computer laboratories are housed in the Graduate Education Building.

Peabody Hall houses the Department of Curriculum and Instruction, classrooms and offices for individual professors. The Health, Physical Education and Recreation (HIPER) Building houses the majority of faculty offices and classrooms for Athletic Training, Community Health Promotion, Kinesiology, Recreation and Sport Management, the Office for Studies on Aging, the Human Performance Laboratory, and the University Recreation offices.

The department of University Recreation serves the university community by providing a diverse selection of recreational opportunities and facilities, which are designed to enhance the quality of life of each participant. University Recreation is organized into eight program areas: Accessible Recreation, Club Sports, Facility Management, Fitness/Wellness, Instructional Programs, Intramural Sports, and the Outdoor Ministry.
The College of Education and Health Professions

The YOU of A

The college offers curricula leading to the Bachelor of Science in Education degree (B.S.E.) with several programs listed below. Several of these degree programs have concentrations and specialties that are described in the section titled “Departments and Majors.”

The college also offers the curriculum leading to the Bachelor of Science in Nursing (B.S.N.). The degree programs are described in this college section under the area of “Departments and Majors.”

MAJORS, CONCENTRATIONS, AND MINORS

Majors and Concentrations

Career and Technical Education
  Business Education
  Competency-Based Teacher Development
  Family and Consumer Sciences Education
  Technology Education
  Childhood Education
  Communication Disorders
  Community Health Promotion
  Elementary Education
  Human Resource Development
  Kinesiology
  P-12 Teaching Physical Education/Wellness & Leisure
  Exercise Science – Pre-Professional
  Applied Exercise Science
  Nursing
  Recreation and Sport Management

Minors

Undergraduate students in the college may declare any official academic minor available at the University of Arkansas. Students must notify the Sylvia Hack Boyer Center for Student Services of their intent to pursue a minor. The college, with the assistance of the college offering the minor, will certify that the requirements of the minor have been satisfied. The academic minor will be designated on the student’s official transcript. Requirements for the minor are listed in the catalog under the department offering the minor. The College of Education and Health Professions only offers one minor in Recreation and Sport Management (Department of Health, Human Performance and Recreation). See page 258 for course requirements.

OTHER PROGRAMS

Curricula Offered For Initial Licensure

Nursing Licensure: Completing the minimum requirements for the degree of Bachelor of Science in Nursing will satisfy the academic requirements for licensure as a Registered Professional Nurse. Students must complete all of the requirements set forth by the Arkansas State Board of Nursing to be licensed as a registered nurse. See adviser for details.

Teacher Licensure and Licensure of other School Personnel:

The University of Arkansas offers approved undergraduate programs of study for initial licensure in childhood education, career and technical education (business education, family and consumer science, technology education), kinesiology (P-12 physical education), speech-language pathology, music and art education, and agriculture education, initial teacher licensure programs in secondary education (English/language arts, drama/speech, social studies, science, mathematics, world language), and childhood education in the Masters of Arts In Teaching (M.A.T.) degree program. The M.A.T. degree program is offered in consecutive summer, fall, and spring semesters with initial enrollment in the summer semester. The M.A.T. is a graduate degree program and requires a minimum of 33 semester hours. The M.A.T. degree program has two areas of emphasis: childhood education and secondary education in drama/speech, English, foreign language, mathematics, science and social studies. Consult the Admissions Process for Initial Teacher Licensure Stages I-IV on page 237 and the Graduate School Catalog for admission and graduation requirements for the M.A.T. degree program. The approved program of study for initial licensure in speech-language pathology is the Master of Science degree in Communication Disorders.

DEGREES OFFERED

The college offers curricula leading to the Bachelor of Science in Education degree (B.S.E.) with several programs listed below. Several of these degree programs have concentrations and specialties that are described in the section titled “Departments and Majors.”

The college also offers the curriculum leading to the Bachelor of Science in Nursing (B.S.N.). The degree programs are described in this college section under the area of “Departments and Majors.”

Procedures for obtaining licensure parallel those used with M.A.T. graduates. There are some non-M.A.T. licensure programs. See the appropriate sections of this catalog for that information. For bachelor's degree licensure requirements in career and technical education, music and art education, and some areas of agriculture education, see appropriate sections of this catalog.

The State Board of Education issues the regulations governing the licensure of teachers in Arkansas. The Board specifies minimum cut-off scores for all Praxis exams. Each application for a teacher's license requires completion of an approved program of study, completion of a state and national background check, and documentation of passing the Praxis exams. Those wishing to add an additional license or endorsement, should contact the Teacher Certification Officer in 350 Peabody Hall for the approved programs of study or go to http://coehp.uark.edu/licensure.html. Look for the menu “Additional Licensure Plan.”

The University Teacher Education Board is composed of the associate deans; faculty representatives from the College of Education and Health Professions; the J. William Fulbright College of Arts and Sciences; the Dale Bumpers College of Agricultural, Food and Life Sciences; public school teachers and/or administrators, and students. The functions are to (1) govern the teacher education and licensure program; (2) establish general policies and procedures necessary to maintain quality in degree programs; (3) oversee the general coordination of the initial licensure process; and (4) approve new courses and course changes in individual licensure program. The Board serves as a liaison group for the faculties involved and emphasizes the importance of teacher education as one of the primary responsibilities of the University.

University Teacher Education Board
The University Teacher Education Board is composed of the associate deans; faculty representatives from the College of Education and Health Professions; the J. William Fulbright College of Arts and Sciences; the Dale Bumpers College of Agricultural, Food and Life Sciences; public school teachers and/or administrators, and students. The functions are to (1) govern the teacher education and licensure program; (2) establish general policies and procedures necessary to maintain quality in degree programs; (3) oversee the general coordination of the initial licensure process; and (4) approve new courses and course changes in individual licensure program. The Board serves as a liaison group for the faculties involved and emphasizes the importance of teacher education as one of the primary responsibilities of the University.

COLLEGE ADMISSION REQUIREMENTS
All entering students (including freshmen, international, and transfer) admitted to the University of Arkansas, Fayetteville, are eligible for admission to the college.

Transfer of Credit
The policies controlling the granting of credit for course work taken at other institutions apply as follows:

1. If a course with a grade of “D” is successfully petitioned for degree credit to the University of Arkansas, the College of Education and Health Professions requires a second petition called “A Petition to Accept ‘D’ Grades for Transfer Credit” to be successfully navigated. The petition can be obtained from the Sylvia Hack Boyer Center for Student Services, 336 Graduate Education Building. Each course will be reviewed by the COEHP Academic Affairs Dean’s Office. Students are encouraged to make an appointment with an academic adviser in the Sylvia Hack Boyer Center for Student Services to discuss options and to clarify this procedure.

2. Courses completed at the lower-division (freshman or sophomore) level at another institution may not count as equivalents of upper-division (junior or senior) level courses offered in the college unless student requests program modification with proper petition approvals.

3. Students should be prepared to submit official course descriptions of transfer course work if there is any question as to whether the college will grant degree credit for such work.

Undeclared Majors
Students enrolled in the College of Education and Health Professions are encouraged to declare a major as soon as possible. For assistance contact the Sylvia Hack Boyer Center for Student Services, 336 Graduate Education Building, 479-575-4203.

COLLEGE SCHOLARSHIPS
The College of Education and Health Professions offers limited numbers of scholarships in varying amounts. Recipient selection is based on a variety of attributes that are specific to each award. Attributes may include but are not limited to: the basis of promise, character, leadership skills, scholarship, or financial need.

Scholarship applications are available in December of each year via the College Web site at http://coehp.uark.edu/#. All current and future students of the college are strongly encouraged to take advantage of these scholarship opportunities. For further information regarding scholarships and the application process, visit the Scholarships link on the College of Education and Health Professions’ Web site or contact the Office of the Associate Dean for Administration.

STUDENT ORGANIZATIONS
There are many general-interest societies and organizations on the campus, and nearly every department of the University maintains an honor society through which high scholarship is rewarded. Of special interest to students in the college are the following:

• Kappa Delta Pi – honor society for education
• Phi Delta Kappa – honor fraternity for graduate students
• Kinesiology Club – for kinesiology majors
• Recreation and Sport Management Majors Club – for recreation and sport management students
• Razorback Athletic Training Association (RATA) – for undergraduate kinesiology majors with a concentration in exercise science – pre-athletic training, entry level graduate athletic training students and graduate assistant athletic trainers in women’s and men’s athletics
• National Student Speech-Language-Hearing Association – for communication disorders majors
• Arkansas Nursing Students Association, National Student Nurse Association, and the Pi Theta chapter of Sigma Theta Tau International Honor Society of Nursing – for nursing majors
• Rehabilitation Counseling Association for Students – rehabilitation counseling program majors.
• Technology Education Collegiate Association – Technology education program majors.

COLLEGE ACADEMIC REGULATIONS

Admission Process for Initial Teacher Licensure
Stage I: Enrollment
Enroll in an undergraduate degree program leading to a potential teacher licensure field. Potential fields include the following:

Agricultural Education – B.S.A.
Art Education – B.F.A.
Career & Technical Education (Business Education) – B.S. E. (initial licensure program, see page 241 for admissions requirements)
Career & Technical Education (Family & Consumer Science) – B.S. E. (initial licensure program, see page 242 for admissions requirements)
Career & Technical Education (Technology Education) – B.S. E. (initial licensure program, see page 243 for admissions requirements)
Childhood Education – B.S.E.
Elementary Education – B.S.E. Licensure Program
Human Environmental Sciences Education – B.S.H.E.S.
Kinesiology P-12 – B.S.E.
Music Education – B.M.
Secondary Education – B.A., B.S.
Speech-Language Pathology – B.S.

Stage II: Evaluation

Complete an Evaluation for Internship by October 1 prior to entering the undergraduate student teaching semester or the Masters of Arts in Teaching (M.A.T.). All non-M.A.T. licensure programs should complete the evaluation by October 1 prior to a fall student teaching and by March 1 prior to a spring student teaching experience. Satisfactory completion of this form does not guarantee admission to the student teaching semester or the Masters of Arts in Teaching (M.A.T.) degree program or other teacher education programs. All requirements must be cleared for the internship. This form is available from the college web site at http://coehp.uark.edu/4880.htm. The form must be completed and returned to the Teacher Certification Officer, 350 Peabody Hall.

Students must meet the following criteria to be cleared for internship:
1. Pass Praxis I test by meeting or exceeding the Arkansas Department of Education cut-off scores. This test should be taken after the student has completed 30 credit hours and upon completion of ENGL 1013, ENGL 1023, and MATH 1203. Please note that several departments have additional program requirements regarding the Praxis I and II. Please consult with adviser for additional requirements.
2. Obtain a “C” or better in the following pre-education core if these courses are required for the chosen program:
   - CIED 1002, CIED 1011, CIED 3023 (PHED 3903 for KINS p-12 majors), and CIED 3033.
   - In addition, for Middle-Level Education and Childhood Education a minimum of “C” or higher must be earned in ENGL 1013, ENGL 1023, ENGL 2003, and MATH 1203 unless UA exemption is earned in one or more of the courses. This does not apply to career and technical education students.
3. Career and technical students may take CATE 1001 Practicum in Career & Technical Education in lieu of CIED 1002 and CIED 1011.
4. Complete additional licensure requirements: Kinesiology majors take CHLP 1103, and PHED 3043. CHED and MLED majors take HIST 3383. SEED Social Studies students take either HIST 4583 or HIST 3383 and any ECON course.
5. Secondary Education majors except for art and music majors, must complete the following courses with a grade of “C” or higher: CIED 4023, CIED 4131, and demonstration of computer competencies in a portfolio.
6. Obtain a “C” or better in the six hours of program-specific courses (see adviser for information), except for Kinesiology P-12.
7. Schedule a visit with adviser for additional requirements including admission to upper-division courses.
8. Consult with adviser regarding Praxis II requirements.
9. Consult adviser for the GPA requirements for the chosen program.

Stage III: Admission

A. Admission to M.A.T.

The following minimum criteria are necessary to be eligible for consideration for admission to the M.A.T. Degree Program: (Consult with faculty adviser for additional requirements set by the chosen program.)
1. Meet all requirements in stages I and II.
2. Complete an appropriate undergraduate degree program.
3. Earn a cumulative GPA of 3.0 on the last 60 hours of Bachelor’s degree for automatic admission to the Graduate School. Consult adviser for the GPA requirements for the chosen program.
4. Obtain recommendation for admission from M.A.T. program area based on successful completion of portfolios, evaluation for internship, GPA requirements, course work requirements, selected written recommendations, an interview, and other requirements specified by the chosen program.
5. Obtain admission to Graduate School. (See UA Graduate School Catalog for details.)
   - Enrollment in each cohort will be limited. Transfer students will be allowed to enter the program on a space-available basis and must progress through all three admission stages.

B. Admission to Career and Technical Education B.S.E.

The following minimum criteria are necessary to be eligible for consideration for admission to the career and technical education B.S.E. teacher licensure program. (Consult with faculty adviser for additional requirements set by the chosen program.)
1. Meet all applicable requirements in Stages I and II.
2. Earn a cumulative GPA of 2.50 or higher before the internship semester in the undergraduate program. Several courses have minimum grade requirements of “C” or better.
3. Please see your adviser for a listing of those courses.
4. Passing scores received on all three parts of Praxis I are required before enrolling in CATE 406v: Teaching Internship, CATE 4041: Lab Management and CATE 4051: Seminar.
5. A successful interview with the teacher education faculty in career and technical education must be complete before enrolling in professional education courses. This is normally completed during the advising registration period.

Stage IV: Graduation

A. Requirements for M.A.T.
1. Meet all requirements in stages I – III.
2. Obtain a minimum cumulative GPA of 3.00.
3. Complete a minimum of 33 graduate semester hours as specified by program area.
4. Satisfactorily complete an internship. The internship or student teaching experience will be completed at a school/district in Benton or Washington County that has been approved by the Northwest Arkansas Partnership Steering Committee.
5. Pass the appropriate Praxis tests (see adviser for the appropriate test) by meeting or exceeding the Arkansas Department of Education cut-off scores. This test is required for most programs. Please consult with adviser.
6. Successfully complete Comprehensive Examination.
7. Consult with adviser for other requirements.
8. Apply for degree at the Graduate School, 119 Osaark Hall.

B. Requirements for Career and Technical Education and Kinesiology P-12
1. Meet all requirements in Stages I - III.
2. Obtain a minimum cumulative GPA of 2.50.
3. Complete all coursework in the Program of Study.
4. Satisfactorily complete a student teaching experience for one semester. The student teaching experience will be completed at a school/district in Benton or Washington County.
5. Pass the appropriate Praxis tests (see adviser for the appropriate test) by meeting or exceeding the Arkansas Department of Education cut-off scores.
6. Successfully complete a teaching portfolio, except for Kinesiology P-12.
7. Consult with adviser for other requirements.
8. Apply for degree.

Initial Licensure

Students who have completed the stages listed above must obtain a licensure packet from the Teacher Certification Officer, 350 Peabody Hall, prior to entering internship. A mandatory meeting is held each April before starting either an internship or a student teaching experience.

Students should always consult the Teacher Certification Officer or adviser regarding licensure requirement changes. Students will not be licensed to teach in Arkansas until they have met all requirements for licensure as set forth by the Arkansas Department of Education.

Students who have completed the B.M. or B.F.A. in music or art education and the B.S.A. in agriculture education and have completed the internship may obtain the licensure packet from the Teacher Certification Officer, 350 Peabody Hall, at the mandatory meeting held each April before starting either an internship or a student teaching experience.
Usually licensure in another state is facilitated by qualifying for a license in Arkansas. Application in another state must be made on the application form of that state, which can be obtained by request from the State Teacher Licensure office in the capital city. An official transcript should accompany the application. In many instances the applications are referred to the Teacher Certification Officer to verify program completion in teacher education.

College Honor Roll
At the close of each semester, the college recognizes students who qualify for the honor roll. They are the 10 percent of the highest-ranking students in each class. Students must carry a minimum of 12 semester hours to be eligible for the Honor Roll and obtain a minimum term GPA of 3.5.

Graduation with Distinction
Graduation with Distinction will be conferred to College of Education and Health Professions students (who are not participating in the college “Honors Program”) based upon their University of Arkansas cumulative grade-point average at the time of graduation. To earn this distinction, a student must have completed at least one-half of the course work required for his or her degree at the University of Arkansas, Fayetteville. The graduation with distinction designation will be assigned as follows:
1. For highest distinction, the student must have a minimum cumulative grade point average of 3.95 and rank in the top 10 percent of the graduating class.
2. For high distinction, the student must have a minimum cumulative grade point average of 3.75 and rank in the top 10 percent of the graduating class.

HONORS PROGRAM
The College of Education and Health Professions Honors Program is designed for students who value and want to be challenged by an exceptional educational experience and want to focus their studies intensively. The program creates and supports an academic environment of intellectual adventure and provides a carefully integrated and demanding curriculum. The rewards are immense: high academic achievement; involvement in undergraduate research; academic distinction of Summa Cum Laude, Magna Cum Laude, or Cum Laude and confirmation of an honors degree on the student’s transcript; and recognition at commencement.

The mission of the Honors Program is to: Establish and maintain an Honors community of learning that is intellectually rigorous, personally and culturally enriching, and fosters learning and discovery through independent and collaborative inquiry; Allow students to be creative, inquisitive and innovative; Support student research and analysis of ideas; Support student academic ventures through mentoring, travel, and supplies when presenting work at undergraduate research symposia; Challenge students to connect the classroom with the larger world by expanding social and cultural experiences and promoting leadership; and Prepare students for admission to and success within graduate and professional schools in the United States and abroad.

Benefits of participating in the Honors Program include: Small class sizes, close contact with talented faculty, opportunity for independent study that counts toward the requirements of the Honors Program, special academic counseling and priority registration, increased confidence and skill in writing, Honors housing, recognition on transcript as “Graduate of the University Honors Program,” enhanced career opportunities, and increased advantages for graduate or professional school applicants.

Admission to the University of Arkansas Honors College assures automatic admission to the COEHP Honors Program for incoming freshmen. The student can apply for admission electronically through the following website: http://honorscollege.uark.edu/503.php. The following are admission criteria for students seeking admission to the COEHP Honors Program:

Entering Freshmen
28 ACT or 1240 SAT score (Critical Reading plus Math). Honors admission is based on your highest composite ACT or SAT score, not on superscores.
3.5 or greater high school GPA

Students Applying as Continuing or Transfer
(within and outside the University of Arkansas)
1. 3.4 cumulative GPA
2. Applications will not be accepted from students who are within three full semesters of anticipated graduation date.
3. Below are the minimum requirements for UA students who have already been accepted into an Honors Program in another college and are transferring to the College of Education and Health Professions:
   • 3.25 GPA at freshman classification (0-29 hours)
   • 3.37 GPA at sophomore classification (30-59 hours)
   • 3.50 GPA at junior classification (60-89 hours)
   • 3.50 GPA at senior classification (90 hours to undergraduate completion)

Application:
1. Complete the Honors Program Continuing and Transfer Application and return to: COEHP Honors Program, Attention Assistant Dean for Academic Affairs, Graduate Education Building, Room 317 Fayetteville, AR 72701
2. Following admission to the COEHP Honors Program, a faculty mentor advisor will be assigned from the student’s academic department in addition to an academic advisor in the Sylvia Hack Boyer Center for Student Services. Eligibility for continued enrollment in the COEHP Honors Program will be based on the following cumulative minimum grade-point averages:
   • 3.25 GPA - At the end of the freshman year (0-29 hours)
   • 3.37 GPA - At the end of the sophomore year (30-59 hours)
   • 3.50 GPA - At the end of the junior year (60-89 hours)
   • 3.50 GPA - At graduation

At the end of each semester, the director of the COEHP honors program will review the academic records of all enrolled honors students to determine whether each one has the cumulative grade-point average to continue in the program. Students with less than a 3.5 GPA will be placed on probation. The student will be re-instanted to the honors program when they have achieved the minimum grade point average. Students will be dismissed from the Honors Program if they violate the University’s Academic Integrity policy at a violation level of 1.0. If the student’s violation level is above 1.0, the student will lose financial scholarships as well.

Honors Degrees
The College of Education and Health Professions is dedicated to providing programs designed to meet the honors student’s needs. To achieve this aim, the college faculty has developed two honors tracts for students, which includes the COEHP Scholars Program and the COEHP Honors Program. Students successfully completing the COEHP Honors Program and Scholars Program will receive the following academic accolades: (1) GPA > 3.9 - Summa Cum Laude, (2) GPA > 3.7 - Magna Cum Laude, (3) GPA > 3.5 - Cum Laude.

Requirements for the COEHP Scholars Program: The Scholars program provides an honors program for students of superior academic talent. Requirements for the scholars program include meeting all University and department degree requirements; completion of a minimum of 18 honors credit hours taken from the University program of study; completion of a minimum of 6 honors credit hours within the student’s program of study includingHNED 3001H Honors Education Thesis Tutorial, three hours of HNED 400VH Honors Education Thesis Project; a minimum of 2 hours of honors courses from the student’s academic department; completion of honors requirements including preparation and oral defense of an honors thesis; and a minimum cumulative grade-point average of 3.5.

Requirements for the COEHP Honors Program: Requirements for the COEHP Honors Program include meeting all University, COEHP, and department degree requirements; completion of a minimum of 12 honors credit hours within the student’s program of study includingHned 3001H Honors Education Thesis Tutorial, three hours of HNED 400VH Honors Education Thesis Project; a minimum of 2 hours of honors courses from the student’s academic department; completion of honors requirements including preparation and oral defense of an honors thesis; and a minimum cumulative grade-point average of 3.5.

For more information about the honors program or to complete an application form,
The YOU of A College of Education and Health Professions

Minimum Requirements for the B.S.E. or B.S.N. Degree

The candidates for a baccalaureate degree from the college must meet University requirements, which specify at least 124 semester hours of work with a grade-point average of at least 2.00 on all work attempted in the University. Students exempting any course must still meet the 124-hour graduation requirement and should consult their adviser for specific program requirements. Exemption of courses does not result in credit earned. The students must comply with the prescriptions and restrictions listed below and under General Studies and must complete the requirements in one or more of the approved degree programs.

Students must also meet all other University Requirements for Graduation, including the University Core requirements (page 41). Students are required to have a pre-graduation check at least one semester prior to the graduation term. Students who complete the pre-graduation check and meet all University and College of Education and Health Professions requirements may apply for graduation under the guidelines detailed on page 39. All course work, University requirements, and college requirements must be completed by the deadline for the term in which applied. Students not graduating in spring, but wishing to participate in the spring commencement ceremony, must apply for graduation by the established priority deadline for the spring term. For clarification, please contact the Sylvia Hack Boyer Center for Student Services, 336 Graduate Education Building, at 479-575-4203.

GRADUATE STUDIES

The Graduate School, in cooperation with the college offers advanced work in education and health professions leading to the degrees of Master of Arts in Teaching, Master of Science, Master of Education, Educational Specialist, Doctor of Education, and Doctor of Philosophy.

The graduate programs include:

- Athletic Training
- Childhood Education
- Communication Disorders
- Community Health Promotion
- Counselor Education
- Curriculum and Instruction
- Educational Leadership
- Educational Statistics and Research Methods
- Educational Technology
- Education Policy
- Elementary Education
- Higher Education
- Kinesiology
- Middle-Level Education
- Physical Education
- Recreation and Sport Management
- Rehabilitation
- Secondary Education
- Special Education
- Workforce Development

The Graduate School awards the graduate degrees. Students who are interested in registering for graduate courses or in becoming candidates for these degrees should consult the dean of the Graduate School and the Graduate School Catalog.

Students who plan to study for an advanced degree in the subject-matter field should consult with the head of the department concerning course requirements to be eligible to begin graduate study. Specialization requirements for a B.S.E. degree in the College of Education and Health Professions may not be sufficient in every field to gain admission for graduate study without deficiencies.

DEPARTMENT AND MAJORS

DEGREE REQUIREMENTS

Minimum Requirements for the B.S.E. or B.S.N. Degree

The candidates for a baccalaureate degree from the college must meet University requirements, which specify at least 124 semester hours of work with a grade-point average of at least 2.00 on all work attempted in the University. Students exempting any course must still meet the 124-hour graduation requirement and should consult their adviser for specific program requirements. Exemption of courses does not result in credit earned. The students must comply with the prescriptions and restrictions listed below and under General Studies and must complete the requirements in one or more of the approved degree programs.

Students must also meet all other University Requirements for Graduation, including the University Core requirements (page 41). Students are required to have a pre-graduation check at least one semester prior to the graduation term. Students who complete the pre-graduation check and meet all University and College of Education and Health Professions requirements may apply for graduation under the guidelines detailed on page 39. All course work, University requirements, and college requirements must be completed by the deadline for the term in which applied. Students not graduating in spring, but wishing to participate in the spring commencement ceremony, must apply for graduation by the established priority deadline for the spring term. For clarification, please contact the Sylvia Hack Boyer Center for Student Services, 336 Graduate Education Building, at 479-575-4203.

GRADUATE STUDIES

The Graduate School, in cooperation with the college offers advanced work in education and health professions leading to the degrees of Master of Arts in Teaching, Master of Science, Master of Education, Educational Specialist, Doctor of Education, and Doctor of Philosophy.

The graduate programs include:

- Athletic Training
- Childhood Education
- Communication Disorders
- Community Health Promotion
- Counselor Education
- Curriculum and Instruction
- Educational Leadership
- Educational Statistics and Research Methods
- Educational Technology
- Education Policy
- Elementary Education
- Higher Education
- Kinesiology
- Middle-Level Education
- Physical Education
- Recreation and Sport Management
- Rehabilitation
- Secondary Education
- Special Education
- Workforce Development

The Graduate School awards the graduate degrees. Students who are interested in registering for graduate courses or in becoming candidates for these degrees should consult the dean of the Graduate School and the Graduate School Catalog.

Students who plan to study for an advanced degree in the subject-matter field should consult with the head of the department concerning course requirements to be eligible to begin graduate study. Specialization requirements for a B.S.E. degree in the College of Education and Health Professions may not be sufficient in every field to gain admission for graduate study without deficiencies.

ACCREDITATIONS

Students who complete the approved program of study leading to initial licensure are eligible to receive licenses to teach at the grade level or in the fields for which they have made preparation upon application and presentation of acceptable scores on the appropriate Praxis exams. However, students must follow licensure guidelines set forth by the Arkansas Department of Education to be licensed to teach.

The teacher education program of the College of Education and Health Professions is accredited by the National Council for Accreditation of Teacher Education (NCATE), 2010 Massachusetts Ave., NW, Suite 500, Washington, D.C. 20036; phone 202-466-7496; Web: www.ncate.org. This accreditation covers the initial teacher preparation programs and/or advanced educator preparation programs. Because of the accreditation by the National Council for Accreditation of Teacher Education, students who complete the curricula as outlined in this catalog are eligible to be recommended for licensure in states that agree to certify graduates who are recommended by the College of Education and Health Professions as having fulfilled its requirements.

The University of Arkansas holds membership in and is accredited by the North Central Association of Colleges and Secondary Schools. The college is also a member of the American Association of Colleges for Teacher Education. The graduate program in communication disorders is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association. The counselor education graduate program is nationally accredited through the Council for the Accreditation of Counseling and Related Educational Programs (CACREP). The Bachelor of Science in Nursing (B.S.N.) degree program is accredited by the Commission on Collegiate Nursing Education and by the National League for Nursing Accrediting Commission. It is also approved by the Arkansas State Board of Nursing. The M.S. degree program in Rehabilitation Counseling is accredited by the Council on Rehabilitation Education (CORE). Graduates of the accredited program are eligible to sit for the Certified Rehabilitation Counselor (CRC) examination.

DEPARTMENTS AND MAJORS

CURRICULUM AND INSTRUCTION (CIED)

Michael K. Daugherty
Department Head
217 Peabody Hall
479-575-4209
mkd03@uark.edu

The Department of Curriculum and Instruction sponsors initial teacher licensure programs in the areas of career and technical education, elementary education, childhood education and secondary education. The department also offers additional licensure plans in ESL, gifted and talented, special education and selected other areas (please see College Web Site licensure link). The Special Education Program also offers a Graduate Certificate in Autism Spectrum Disorders (ASD). Additional secondary school licensure programs are made available with the cooperation of the Department of Health Science, Kinesiology, Recreation, and Dance; the Department of Rehabilitation, Human Resources and Communication Disorders; the J. William Fulbright College of Arts and Sciences; and the Dale Bumpers College of Agricultural, Food and Life Sciences.

See Page 331 for Curriculum and Instruction (CIED) courses.
CAREER AND TECHNICAL EDUCATION (CATE)

Christy Wear
Academic Counselor for Freshmen and Sophomores
111 Peabody Hall
479-575-6430
cswear@uark.edu

FACULTY
• Professors Daugherty, Thompson (C.)
• Associate Professor Orr
• Clinical Instructor Carter

The University of Arkansas has been approved by the State Board for Career and Technical Education for the preparation of teachers, supervisors, and administrators in career and technical education. Three of the four concentration areas lead to teacher licensure. These three concentration areas include: business education (BUED), family and consumer sciences education (FCSE) and technology education (TEED). One other concentration in career and technical education: competency-based teacher development (CBTD) does not lead to teacher licensure.

See Page 326 for Career and Technical Education (CATE) courses.

Business Education (BUED)

Betsy Orr
Adviser
315 Peabody Hall
479-575-6430
borr@uark.edu

http://cied.uark.edu/businessed.php

Students pursuing the Bachelor of Science in Education degree may select the business education program concentration as a field of specialization in career and technical education. Completion of the B.S.E. will prepare students to teach business education at the junior high level and secondary education level.

In addition to the general studies requirement the following courses are required for a concentration in business education. All professional education courses must have a grade of “C” or better. No teaching methods courses may be taken by core for a concentration in business education (bued). All professional education courses must

I. University Core Requirements (See page 41)

Required University Core for Business Education
PSYC 3023 General Psychology
ECON 2013 Principles of Macroeconomics
ECON 2023 Principles of Microeconomics
MATH 2053 Finite Math

II. Professional Education

CIED 3023 Survey of Exceptionalities
CIED 3033 Classroom Learning Theory
CATE 1001 Practicum in Career & Technical Education
CATE 4003 Introduction to Professionalism
CATE 4013 Teaching Strategies
CATE 4023 Classroom Management

CATE 4033 Assessment/Program Evaluation
CATE 4041 Lab Management
CATE 4051 Seminar
CATE 406X Teaching Internship

III. Technical Requirements

WCOB 1012 Legal Environment of Business
WCOB 1023 Business Foundations
WCOB 1033 Data Analysis and Interpretation
WCOB 1120 Computer Competency Requirement
WCOB 2013 Markets and Consumers
WCOB 2023 Production and Delivery of Goods and Services
WCOB 2043 Acquiring and Managing Financial Resources
Any 3 hour computer course
Any 3 hour MKTG course
CATE 4803 Problems in Career & Technical Education (Word Processing)

COMM 1313 Public Speaking
MATH 1203 if required (see adviser)
27 hours Electives (see adviser for course list)

Total 124 hours are required by the University of Arkansas for a degree.

IV. Admission requirements for Spring, Senior Year:

1. Students must have a cumulative GPA of 2.5 or higher to be admitted for the student teaching semester.
2. Passing scores on all three parts of Praxis I are required before enrolling in CATE 406v: Teaching Internship.
3. Passing scores are required for Praxis II: Subject Matter before enrolling in CATE 406v: Teaching Internship.
4. Students must complete a successful “Internship Admission Interview” with career and technical education faculty. These interviews are scheduled with all senior students during the fall semester.

Note: All students seeking licensure in the state of Arkansas are subject to a criminal background check. Forms for this procedure may be obtained at 350 Graduate Education Building, at the State Department, or any police station, including the campus police. These background checks take up to six months to process; therefore, students are advised to complete and submit the forms to the proper authorities six months in advance of actually applying for a license. Arkansas will not certify anyone who has been convicted of a felony.

Career and Technical Education B.S.E. with Business Education Concentration

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan in Career and Technical Education (teaching option) with a concentration in Business Education should see page 42 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1013 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>†Fine Arts or Humanities</td>
<td></td>
</tr>
<tr>
<td>MATH 1203 or equivalent – if required</td>
<td></td>
</tr>
<tr>
<td>†Science with Lab</td>
<td></td>
</tr>
<tr>
<td>COMM 1313 Public Speaking</td>
<td></td>
</tr>
<tr>
<td>WCOB 1120 Computer Competency Requirement</td>
<td>0</td>
</tr>
<tr>
<td>CATE 1001 Practicum in Career &amp; Technical Education</td>
<td>1</td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>17</td>
</tr>
</tbody>
</table>

Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1023 Composition II</td>
<td>3</td>
</tr>
<tr>
<td>†Fine Arts or Humanities</td>
<td></td>
</tr>
<tr>
<td>Y.U.S. History</td>
<td></td>
</tr>
<tr>
<td>†PSYC 3023 General Psychology</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>CATE 4003 Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>16</td>
</tr>
</tbody>
</table>

Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
</table>

College of Education and Health Professions
Family and Consumer Sciences Education (FCSE)

Cecelia K. Thompson
Adviser
314 Peabody Hall
479-575-2581

Christy Wear
Academic Counselor for Freshmen and Sophomores
111 Peabody Hall
479-575-6860
cswear@uark.edu

Students pursuing the Bachelor of Science in Education degree may select the family and consumer sciences education program concentration as a field of specialization in career and technical education.

Completion of the B.S.E. will prepare students to teach family and consumer sciences at the junior high and secondary education level or to prepare students to work in professional careers in the Cooperative Extension Service, business, industry, or social services.

In addition to the general studies, the following courses are required for a concentration in family and consumer sciences education.

<table>
<thead>
<tr>
<th>Hours</th>
<th>University Core Requirements for Concentration in Family and Consumer Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Required University Core (see Page 41)</td>
</tr>
<tr>
<td></td>
<td>PSYC 2003 General Psychology</td>
</tr>
</tbody>
</table>

Technical Requirements

1. Earn a cumulative GPA of 2.5 or higher
2. Passing scores on Praxis I
3. Take Praxis II
4. Successful interview with career and technical education faculty in the Department of Curriculum and Instruction.

Note: All students seeking licensure in the state of Arkansas are subject to a criminal background check. Forms for this procedure may be obtained at 216 Peabody Hall, at the State Department, or any police station, including the campus police. These background checks take up to six months to process; therefore, students are advised to complete and submit the forms to the proper authorities six months in advance of actually applying for a license. Arkansans will not certify anyone who has been convicted of a felony.

Career and Technical Education B.S.E. with Family and Consumer Sciences Education Concentration

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan in Career and Technical Education with a concentration in Family and Consumer Sciences Education should see page 42 in the Academic Regulations chapter for university requirements of the program.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>3  ENGL 1013 Composition I</td>
</tr>
<tr>
<td>3  Math 1203 College Algebra or equivalent</td>
</tr>
<tr>
<td>3  US History</td>
</tr>
<tr>
<td>3  HESC 1403 Lifespan Development</td>
</tr>
<tr>
<td>4  CHEM 1103/1101L or CHEM 1073/1071L</td>
</tr>
<tr>
<td>16  Semester Hours</td>
</tr>
</tbody>
</table>

Admission requirements for Spring, Senior Year:

1. Earn a cumulative GPA of 2.5 or higher
2. Passing scores on Praxis I
3. Take Praxis II
4. Successful interview with career and technical education faculty in the Department of Curriculum and Instruction.

Note: All students seeking licensure in the state of Arkansas are subject to a criminal background check. Forms for this procedure may be obtained at 216 Peabody Hall, at the State Department, or any police station, including the campus police. These background checks take up to six months to process; therefore, students are advised to complete and submit the forms to the proper authorities six months in advance of actually applying for a license. Arkansans will not certify anyone who has been convicted of a felony.
Technology Education (TEED)

Vinson Carter
Adviser
314 Peabody Hall
479-575-3076

Christy Wear
Academic Counselor for Freshmen and Sophomores
111 Peabody Hall
479-575-6860
cswear@uark.edu

A Bachelor of Science in Education degree with a concentration in Technology Education is a licensure program that prepares students to teach technology, pre-engineering, or other technical subject matter at the high school, middle-level, or community college. Additionally, the program prepares one to enter mid-level technical/management careers in business and industry. The concentration is a specialized field of study within the Career and Technical Education program at the University of Arkansas.

University Core Requirements (State Minimum Core)

See Page 41

Science concentration of core must include:
- PHYS 2013/2011L College Physics and Lab
- MATH 2043 Survey of Calculus

Technical Requirements

- TEED 1103 The Nature of Technology
- TEED 2103 Technology and Society
- GNEG 1111 Introduction to Engineering I
- GNEG 1121 Introduction to Engineering II
- TEED 3103 Frameworks for Resolving Technological Challenges
- TEED 4103 Engineering Design Capstone
- GNEG 1122 Introduction to CAD
- TEED 3303 The Technologies of Energy and Movement
- TEED 3203 The Technology of Communication
- INEG 3513 Manufacturing Design and Processes
- AGME 3173 Electricity in Agriculture
- AGME 3042 Agricultural Construction Technology

Professional Education

- COMM 1313 Public Speaking
- CIED 1003 Introduction to Technology in Education
- CATE 1001 Practicum in CATE
- CIED 3023 Survey of Exceptionalities
- CIED 3033 Classroom Learning Theory
- CATE 4003 Introduction to Professionalism
- CATE 4013 Teaching Strategies
- CATE 4023 Classroom Management
- CATE 4033 Assessment/Program Evaluation
- CATE 4041 Lab Management
- CATE 4051 Seminar
- CATE 406V Teaching Internship (12 hours)

Technical Electives

20

Total Hours

124

Internship Semester (Spring Semester/Senior Year) Admission Criteria:
1. Candidate must hold a cumulative GPA of 2.50 or higher
2. Candidate must have taken and passed the Praxis I examination during the previous semester or earlier
3. Candidate must have taken and passed the Praxis II content examination during the previous semester or earlier
4. Candidate must complete a successful “internship admission interview” with

Career & Technical Education faculty. Note these interviews are scheduled with all senior students during the fall semester.

Note: All students seeking licensure in the State of Arkansas are subject to a criminal background check. Forms needed to complete this procedure may be obtained in 340 Graduate Education Building on the University of Arkansas campus. These forms may also be obtained from any police station (including the University of Arkansas Police station) or directly from the Arkansas State Department. These background checks take up to six months to process; therefore, students are advised to complete and submit the forms to the proper authorities at least six months in advance of graduation (or six months prior to applying for a teaching license). Arkansas will not grant a teaching license to anyone who has been convicted of a felony.

Career and Technical Education B.S.E. with Technology Education Concentration

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan in Technology Education...
should see page 42 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1
3 ENGL 1013 Composition I
1 GNEG 1111 Introduction to Engineering I
3 † Social Science
2 GNEG 1122 Introduction to CAD
3 † U.S. History
1 CATE 3001 Practicum in Career & Technical Education
13 Semester Hours

Spring Semester Year 1
3 ENGL 1023 Composition II
1 GNEG 1121 Introduction to Engineering II
3 AGME 3173 Electricity in Agriculture
3 TEED 1103 The Nature of Technology
3 MATH 2043 Survey of Calculus
3 Technical Elective Course  ***
16 Semester Hours

Fall Semester Year 2
4 PHYS 2013/2011L College Physics with lab
3 † Fine Arts or Humanities
3 COMM 1333 Public Speaking
3 TEED 2103 Technology & Society
3 CIED 1003 Introduction to Technology in Education
3 † Social Science
3 Technical Elective Course  ***
16 Semester Hours

Spring Semester Year 2
3 Technical Elective Course  ***
4 University Core Science with lab
3 TEED 3103 Tech. Research, Experimentation, & Trouble-shooting
3 † Fine Arts or Humanities
3 † Social Science
16 Semester Hours

Fall Semester Year 3
3 CIED 3023 Survey of Exceptionalities
3 CIED 3033 Classroom Learning Theory
3 TEED 3203 Information and Communications Systems
3 INEG 3513 Manufacturing Design and Processes
4 Technical Elective Course  ***
16 Semester Hours

Spring Semester Year 3
3 TEED 3303 Energy, Power, & Transportation
3 † Social Science
3 AGME 3042 Construction Technology
3 Technical Elective Course  ***
3 Technical Elective Course  ***
4 Technical Elective Course  ***
18 Semester Hours

Fall Semester Year 4
3 TEED 4103 Eng. Design for TE Capstone
3 CATE 4003 Professionalism
3 CATE 4013 Teaching Strategies
3 CATE 4023 Classroom Management
3 CATE 4033 Assessment & Program Evaluation
15 Semester Hours

Spring Semester Year 4
1 CATE 4041 Lab Management
1 CATE 4051 Seminar
12 CATE 406V Teaching Internship (12 hours)
14 Semester Hours
124 Total Hours

Competency-Based Teacher Development (CBTD)

The YOU of A College of Education and Health Professions Technical instructors who desire to obtain a Bachelor of Science in Education degree or become certified as a master instructor in the post-secondary vocational and secondary school systems. CBTD concentration utilizes the online teacher development courses and is field-based.

CHILDOOD EDUCATION (ELED)

FACULTY
- Associate Professors Collier, Imbeau, Penner-Williams
- Clinical Associate Professor Eilers
- Assistant Professors Beasley, Paulk, Wissehr
- Clinical Assistant Professors Brown (D.), Casey, Elsass, Mounts
- Clinical Instructors Owen, Kerr, Kindall, Smith (D.)

The Department of Curriculum and Instruction offers programs that prepare candidates for initial teacher licensure in Childhood Education. The B.S.E. degree in Childhood Education is not an initial teacher licensure program but instead leads to the Master of Arts in Teaching (M.A.T.), which is the initial teacher licensure preparation program. Information about the M.A.T. degree program can be found in the University of Arkansas Graduate Catalog.

Admission to the B.S.E. in Childhood Education is competitive and consists of a three-stage process. Admission will be determined by the Childhood Education faculty based on the 5 items listed below in Stage II.

Stage I: Pre-Childhood Education (PCHED)
1. Complete all program pre-requisites including the first 62 or 63 hours of the 8-semester plan (see 8-semester table below)
2. Obtain a minimum of 2.7 GPA on UA coursework.
3. Complete the following courses with a “C” or better: COMM 1313, MATH 1203 or equivalent, ENGL 1013, and ENGL 1023.
4. Obtain a passing score on the Math, Reading, and Writing sections of the Praxis I.

Stage II: Admission to the Childhood Education Program (CHED)
1. Admission to the University of Arkansas Graduate School.
3. Oral Interview.
4. Submission of Writing and Editing Samples.
5. Submission of passing score on Math, Reading, and Writing sections of Praxis I Exam.

Stage III: Requirements for Program Continuation.
1. Declaration of endorsement area of ESL, SPED, STEM, or Grades 5/6.
2. Maintain a minimum cumulative GPA of 2.7.
3. All non-methods math, science, social studies and HESC courses as well as CIED 3003/3001, CIED 3023, CIED 3033, and CIED 3263 must be completed prior to senior year.

Master of Arts in Teaching (M.A.T.)
The Masters of Arts in Teaching (M.A.T.) is the degree that leads to initial teacher licensure. This is a graduate program and applicants must meet the admission requirements of the Graduate School. Applicants must have completed all requirements for the B.S.E. by the end of spring semester to be considered for admission into the M.A.T., which is a year-long field-based degree that starts during the summer prior to the regular fall-spring academic year.

M.A.T. candidates will be advised by faculty advisers.

Admission requirements:
1. Admission to the University of Arkansas Graduate School.
3. Cumulative GPA of 3.0 on the last 60 hours of coursework. Including any transfer work or grade forgiveness.
4. Passing score on Praxis II, Early Childhood: Content Knowledge (10022).
5. Passing score on M.A.T. entrance portfolio.

NOTE: Requirements for teacher licensure vary from state to state and may differ from teacher preparation programs. Please note that Arkansas requires all applicants to successfully complete a criminal background check. Arkansas Teacher Licensure requirements can be found at http://arkansased.org/teachers/licensureinitial.html.

NOTE: All professional education courses in CIED must have a grade of “C” or better. No teaching methods courses may be taken by correspondence. CIED 3103, 3113, 3123, and 4153 are offered in the fall only; CIED 3133, 3143, 4101, and 4113, are offered in the spring semester only.

<table>
<thead>
<tr>
<th>Childhood Education Requirements</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL option</td>
<td>35</td>
</tr>
<tr>
<td>University Core (State Minimum Core)</td>
<td>35</td>
</tr>
<tr>
<td><em>Specifically required University Core for Childhood Education Requirements</em></td>
<td>35</td>
</tr>
<tr>
<td>NOTE: All professional education courses in CIED must have a grade of “C” or better. Enrollment in upper-division professional education courses may be limited. Contact advisers for specific details. No teaching methods courses may be taken by correspondence.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Childhood Education</th>
<th>25-26</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIED 3123 Mathematics Methods</td>
<td></td>
</tr>
<tr>
<td>CIED 3133 Integrated Social Studies</td>
<td></td>
</tr>
<tr>
<td>CIED 3143 Teaching Science in the Elementary Grades</td>
<td></td>
</tr>
<tr>
<td>CIED 4101 Practicum</td>
<td></td>
</tr>
<tr>
<td>CIED 4113 Integrated Communication Skills</td>
<td></td>
</tr>
<tr>
<td>CIED 4153 Classroom Management</td>
<td></td>
</tr>
<tr>
<td>CIED 3003/3001 Early Childhood Ed/PRACTICUM or HESC 3402/3401L Child Guidance and Lab</td>
<td></td>
</tr>
<tr>
<td>CIED 3263 Language Development for the Educator</td>
<td></td>
</tr>
<tr>
<td>HESC 2433 Child Development</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interdisciplinary Studies</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics (in addition to MATH 1203)</td>
<td></td>
</tr>
<tr>
<td>MATH 2213 Survey of Math Structures I</td>
<td></td>
</tr>
<tr>
<td>MATH 2223 Survey of Math Structures II</td>
<td></td>
</tr>
<tr>
<td>General Science (12 hours)</td>
<td></td>
</tr>
<tr>
<td>*BIOL 1543/1541L Principles of Biology</td>
<td></td>
</tr>
<tr>
<td>*GEOL 1113/1111L General Geology/Lab</td>
<td></td>
</tr>
<tr>
<td>Physical science course with laboratory</td>
<td></td>
</tr>
<tr>
<td>Social Science (18 hours)</td>
<td></td>
</tr>
<tr>
<td>ECON 3053 Economics for Elementary Teachers or any Economics course**</td>
<td></td>
</tr>
<tr>
<td>3 hours Geography **</td>
<td></td>
</tr>
<tr>
<td>*PLSC 2003 American National Government</td>
<td></td>
</tr>
<tr>
<td>*PSYC 2003 General Psychology</td>
<td></td>
</tr>
<tr>
<td>Arkansas History</td>
<td></td>
</tr>
<tr>
<td>HIST 3383 Arkansas and the Southwest or any Arkansas history course</td>
<td></td>
</tr>
<tr>
<td>History (select one of the following):</td>
<td></td>
</tr>
<tr>
<td>*HIST 2003 Hist/American People to 1877</td>
<td></td>
</tr>
<tr>
<td>*HIST 2013 Hist/American People, 1877 to Present</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-Education Core</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIED 1002 Introduction to Education</td>
<td></td>
</tr>
<tr>
<td>CIED 1011 Introduction to Education Practicum</td>
<td></td>
</tr>
<tr>
<td>CIED 3023 Survey of Exceptionalities</td>
<td></td>
</tr>
<tr>
<td>CIED 3033 Classroom Learning Theory</td>
<td></td>
</tr>
<tr>
<td>CIED 1003 Introduction to Technology in Education or any 3-hour computer course</td>
<td></td>
</tr>
<tr>
<td>CIED 3103 Children's Literature</td>
<td></td>
</tr>
<tr>
<td>CIED 3113 Emergent and Developmental Literacy</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aesthetics</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>3 hours University Core Fine Arts</em>*</td>
<td></td>
</tr>
<tr>
<td><em>3 hours University Core Humanities</em>*</td>
<td></td>
</tr>
<tr>
<td>COMM 1313 Public Speaking</td>
<td></td>
</tr>
<tr>
<td>CIED 4403 Understanding Cultures in the Classroom</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>20-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for Childhood Education</td>
<td>124</td>
</tr>
</tbody>
</table>

** Students should meet with adviser to determine Core requirements.

<table>
<thead>
<tr>
<th>Childhood Education Requirements</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED option</td>
<td>35</td>
</tr>
<tr>
<td>University Core (State Minimum Core)</td>
<td>35</td>
</tr>
<tr>
<td>*Specifically required University Core for Childhood Education major (see below)</td>
<td>35</td>
</tr>
<tr>
<td>NOTE: All professional education courses in CIED must have a grade of “C” or better. Special Education licensure courses need to have a grade of “B” or better to be eligible for the license. Enrollment in upper-division professional education courses may be limited. Contact advisers for specific details. No teaching methods courses may be taken by correspondence.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Childhood Education</th>
<th>25-26</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIED 3003/3001 Early Childhood Ed/PRACTICUM or HESC 3402/3401L Child Guidance/Lab</td>
<td></td>
</tr>
<tr>
<td>CIED 3123 Math Methods</td>
<td></td>
</tr>
<tr>
<td>CIED 3133 Integrated Social Studies</td>
<td></td>
</tr>
<tr>
<td>CIED 3143 Teaching Science in the Elementary Grades</td>
<td></td>
</tr>
<tr>
<td>CIED 3263 Language Development for the Educator</td>
<td></td>
</tr>
<tr>
<td>CIED 4101 Practicum</td>
<td></td>
</tr>
<tr>
<td>CIED 4113 Integrated Communication Skills</td>
<td></td>
</tr>
<tr>
<td>CIED 4153 Classroom Management</td>
<td></td>
</tr>
<tr>
<td>HESC 2433 Child Development</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interdisciplinary Studies</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics (in addition to MATH 1203)</td>
<td></td>
</tr>
<tr>
<td>MATH 2213 Survey of Math Structures I</td>
<td></td>
</tr>
<tr>
<td>MATH 2223 Survey of Math Structures II</td>
<td></td>
</tr>
<tr>
<td>General Science (12 hours)</td>
<td></td>
</tr>
<tr>
<td>*BIOL 1543/1541L Principles of Biology</td>
<td></td>
</tr>
<tr>
<td>*GEOL 1113/1111L General Geology/Lab</td>
<td></td>
</tr>
<tr>
<td>Physical science course with laboratory</td>
<td></td>
</tr>
<tr>
<td>Social Science (18 hours)</td>
<td></td>
</tr>
<tr>
<td>ECON 3053 Economics for Elementary Teachers or any Economics course**</td>
<td></td>
</tr>
<tr>
<td>3 hours Geography **</td>
<td></td>
</tr>
<tr>
<td>*PLSC 2003 American National Government</td>
<td></td>
</tr>
<tr>
<td>*PSYC 2003 General Psychology</td>
<td></td>
</tr>
<tr>
<td>Arkansas History</td>
<td></td>
</tr>
<tr>
<td>HIST 3383 Arkansas and the Southwest or any Arkansas history course</td>
<td></td>
</tr>
<tr>
<td>History (select one of the following):</td>
<td></td>
</tr>
<tr>
<td>*HIST 2003 Hist/American People to 1877</td>
<td></td>
</tr>
<tr>
<td>*HIST 2013 Hist/American People, 1877 to Present</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-Education Core</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIED 1002 Introduction to Education</td>
<td></td>
</tr>
<tr>
<td>CIED 1011 Introduction to Education Practicum</td>
<td></td>
</tr>
<tr>
<td>CIED 3023 Survey of Exceptionalities</td>
<td></td>
</tr>
<tr>
<td>CIED 1003 Introduction to Technology in Education or any 3-hour computer course</td>
<td></td>
</tr>
<tr>
<td>CIED 3033 Classroom Learning Theory</td>
<td></td>
</tr>
<tr>
<td>CIED 3103 Children's Literature</td>
<td></td>
</tr>
<tr>
<td>CIED 3113 Emergent and Developmental Literacy</td>
<td></td>
</tr>
</tbody>
</table>
### Childhood Education Requirements

**Hours**

<table>
<thead>
<tr>
<th>University Core (State Minimum Core)</th>
<th>35</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Specifically required University Core for Childhood Education major (see below)</em></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** All professional education courses in CIED must have a grade of "C" or better. Special Education licensure courses need to have a grade of "B" or better to be eligible for the license. Enrollment in upper-division professional education courses may be limited. Contact advisers for specific details. No teaching methods courses may be taken by correspondence.

### Childhood Education

- CCIED 3123 Mathematics Methods
- CIED 3143 Teaching Science in the Elementary Grades
- CIED 4101 Practicum
- CIED 4113 Integrated Communication Skills
- CIED 4153 Classroom Management
- CIED 3003/3001 Early Childhood Ed/Practicum or HESC 3402/3401L Child Guidance/Lab
- CIED 3263 Language Development for the Educator
- HESC 2433 Child Development

**STEM option**

- CIED 3123 Mathematics Methods
- CIED 3133 Integrated Social Studies
- CIED 3143 Teaching Science in the Elementary Grades
- CIED 4101 Practicum
- CIED 4113 Integrated Communication Skills
- CIED 4153 Classroom Management
- CIED 3003/3001 Early Childhood Ed/Practicum or HESC 3402/3401L Child Guidance/Lab
- CIED 3263 Language Development for the Educator
- HESC 2433 Child Development

### Pre-Education Core

- †CIED 1002 Intro. to Education
- †CIED 1011 Intro. to Education Practicum
- †CIED 3023 Survey of Exceptionalities
- †CIED 3033 Classroom Learning Theory
- CIED 1003 Introduction to Technology in Education or any 3 hour computer course
- CIED 3103 Children’s Literature
- CIED 3113 Emergent and Developmental Literacy

### Aesthetics

- 3 hours University Core Fine Arts
- 3 hours University Core Humanities
- COMM 1313 Public Speaking
- CIED 4513 Teaching Children with Mild Disabilities
- CIED 4523 Teaching Children with Severe Disabilities

**Electives**

**20-21**

**Total for Childhood Education**

**124**

**Students should meet with adviser to determine Core requirements**

### Childhood Education Requirements

**STEM option**

**Hours**

<table>
<thead>
<tr>
<th>University Core (State Minimum Core)</th>
<th>35</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Specifically required University Core for Childhood Education major (see below)</em></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** All professional education courses in CIED must have a grade of "C" or better. Enrollment in upper-division professional education courses may be limited. Contact advisers for specific details. No teaching methods courses may be taken by correspondence.

### Childhood Education

- CCIED 3123 Mathematics Methods
- CIED 3143 Teaching Science in the Elementary Grades
- CIED 4101 Practicum
- CIED 4113 Integrated Communication Skills
- CIED 4153 Classroom Management
- CIED 3003/3001 Early Childhood Ed/Practicum or HESC 3402/3401L Child Guidance/Lab
- CIED 3263 Language Development for the Educator
- HESC 2433 Child Development

### Pre-Education Core

- †CIED 1002 Intro. to Education
- †CIED 1011 Intro. to Education Practicum
- †CIED 3023 Survey of Exceptionalities
- †CIED 3033 Classroom Learning Theory
- CIED 1003 Introduction to Technology in Education or any 3 hour computer course
- CIED 3103 Children’s Literature
- CIED 3113 Emergent and Developmental Literacy

### Aesthetics

- 3 hours University Core Fine Arts
- 3 hours University Core Humanities
- COMM 1313 Public Speaking
- CIED 3053 The Emerging Adolescent
- CIED 3043 Introduction to Middle Level Principles and Methods

**Electives**

**20-21**

**Total for Childhood Education**

**124**

**Students should meet with adviser to determine Core requirements**
### Aesthetics
- 3 hours University Core Fine Arts**
- 3 hours University Core Humanities**

**3 hours University Core Fine Arts**
**3 hours University Core Humanities**

COMM 1313 Public Speaking
TEED 4033 Introduction to STEM Education
TEED 5023 Creativity and Innovation in STEM Education

<table>
<thead>
<tr>
<th>Electives</th>
<th>20-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for Childhood Education</td>
<td>124</td>
</tr>
</tbody>
</table>

** Students should meet with adviser to determine Core requirements

### Childhood Education B.S.E.

#### Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan should see page 42 in the Academic Regulations chapter for university requirements of the program.

**Fall Semester Year 1**
- 3 †ENGL 1013 Composition I
- 3 †MATH 1203 College Algebra (or equivalent)
- 4 BIOL 1543/1541L Principles of Biology with lab
- 3 University Core Fine Arts
- 3 HIST 2013 U.S. History

16 Semester Hours

**Spring Semester Year 1**
- 3 †ENGL 1023 Composition II
- 3 MATH 2213 Survey of Math Structures I
- 3 COMM 1313 Public Speaking
- 2 †CIED 1002 Introduction to Education
- 1 †CIED 1011 Practicum
- 3 PSYC 2003 General Psychology

15 Semester Hours

**Fall Semester Year 2**
- 4 University Core Physical Science with lab
- 3 University Core Humanities
- 3 MATH 2223 Survey of Math Structures II
- 3 PLSC 2003 American National Government
- 3 Electives

16 Semester Hours

**Spring Semester Year 2**
- 3 HESC 2433 Child Development
- 3 CIED 1003 Introduction to Technology in Education or any computer course
- 3 Electives
- 3 Any 3-hour GEOG course
- 3 HIST 3383 Arkansas and the Southwest or any 3-hour Arkansas History course

15 Semester Hours

**Fall Semester Year 3**
- 4 GEOL 1113/1111L General Geology with lab
- 3 ECON 3053 Economics for Elem. Teachers or any economics course
- 3 †CIED 3263 Language Development/Educator
- 6 Electives

16 Semester Hours

**Spring Semester Year 3**
- 3 †CIED 3033 Classroom Learning Theory
- 3 †CIED 3023 Survey of Exceptionalities
- 3-4 †CIED 3003/3001 Early Childhood Education or HESC 3402/3401L Child Guidance/Lab
- 6 Electives

15-16 Semester Hours

**Fall Semester Year 4**
- 3 **CIED 3103 Children's Literature
- 3 **CIED 3113 Emergent & Developmental Literacy
- 3 **CIED 3123 Math Methods
- 3 **CIED 4153 Classroom Management
- 3 ESL Elective or Special Education Elective

15 Semester Hours

**Spring Semester Year 4**
- 3 **CIED 4113 Integrated Communication Skills
- 3 **CIED 3133 Integrated Social Studies
- 1 **CIED 4101 Practicum

** M.A.T. Degree Program Requirements

**ESL option**

- Required Courses for the M.A.T. Core
  - CIED 5013 Measurement, Research, and Statistical Concepts in the Schools
  - CIED 5022 Classroom Management Concepts
  - CIED 5032 Curriculum Design Concepts for Teachers
  - CIED 5053 Multicultural Issues in Elementary Education

- Additional Program Requirements
  - CIED 5003 Childhood Seminar
  - CIED 5073 Case Study in Childhood Education
  - CIED 5173 Literacy Assessment and Intervention
  - CIED 5162 Applied Practicum
  - CIED 508V Childhood Education Cohort Teaching Internship (6 hours)
  - CIED 5953 Second Language Methodologies
  - CIED 5953 Second Language Assessment

**SPED option**

- Required Courses for the M.A.T. Core
  - CIED 5013 Measurement, Research, and Statistical Concepts in the Schools
  - CIED 5022 Classroom Management Concepts
  - CIED 5032 Curriculum Design Concepts for Teachers
  - CIED 5053 Multicultural Issues in Elementary Education

- Additional Program Requirements
  - CIED 5003 Childhood Seminar
  - CIED 5073 Case Study in Childhood Education
  - CIED 5183 Literacy Assessment and Intervention
  - CIED 5162 Applied Practicum
  - CIED 508V Childhood Education Cohort Teaching Internship (6 hours)
  - CIED 5343 Analysis of Behavior for Teachers
  - CIED 5773 Methods for Young Children with Disabilities

**Grades 5/6 option**

- Required Courses for the M.A.T. Core
  - CIED 5013 Measurement, Research, and Statistical Concepts in the Schools
  - CIED 5022 Classroom Management Concepts
  - CIED 5032 Curriculum Design Concepts for Teachers
  - CIED 5053 Multicultural Issues in Elementary Education

- Additional Program Requirements
  - CIED 5003 Childhood Seminar
  - CIED 5073 Case Study in Childhood Education
  - CIED 5183 Literacy Assessment and Intervention
  - CIED 5162 Applied Practicum

**MA.T. Degree Program Requirements**

<table>
<thead>
<tr>
<th>Hours</th>
<th>M.A.T. Degree Program Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Required Courses for the M.A.T. Core</td>
</tr>
<tr>
<td>10</td>
<td>CIED 5013 Measurement, Research, and Statistical Concepts in the Schools</td>
</tr>
<tr>
<td></td>
<td>CIED 5022 Classroom Management Concepts</td>
</tr>
<tr>
<td></td>
<td>CIED 5032 Curriculum Design Concepts for Teachers</td>
</tr>
<tr>
<td></td>
<td>CIED 5053 Multicultural Issues in Elementary Education</td>
</tr>
<tr>
<td>23</td>
<td>Additional Program Requirements</td>
</tr>
<tr>
<td></td>
<td>CIED 5003 Childhood Seminar</td>
</tr>
<tr>
<td></td>
<td>CIED 5073 Case Study in Childhood Education</td>
</tr>
<tr>
<td></td>
<td>CIED 5183 Literacy Assessment and Intervention</td>
</tr>
<tr>
<td></td>
<td>CIED 5162 Applied Practicum</td>
</tr>
<tr>
<td></td>
<td>CIED 508V Childhood Education Cohort Teaching Internship (6 hours)</td>
</tr>
<tr>
<td></td>
<td>CIED 5343 Analysis of Behavior for Teachers</td>
</tr>
<tr>
<td></td>
<td>CIED 5773 Methods for Young Children with Disabilities</td>
</tr>
</tbody>
</table>

**ESL Elective or Special Education Elective**

<table>
<thead>
<tr>
<th>Hours</th>
<th>M.A.T. Degree Program Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Required Courses for the M.A.T. Core</td>
</tr>
<tr>
<td></td>
<td>CIED 5013 Measurement, Research, and Statistical Concepts in the Schools</td>
</tr>
<tr>
<td></td>
<td>CIED 5022 Classroom Management Concepts</td>
</tr>
<tr>
<td></td>
<td>CIED 5032 Curriculum Design Concepts for Teachers</td>
</tr>
<tr>
<td></td>
<td>CIED 5053 Multicultural Issues in Elementary Education</td>
</tr>
<tr>
<td>23</td>
<td>Additional Program Requirements</td>
</tr>
<tr>
<td></td>
<td>CIED 5003 Childhood Seminar</td>
</tr>
<tr>
<td></td>
<td>CIED 5073 Case Study in Childhood Education</td>
</tr>
<tr>
<td></td>
<td>CIED 5183 Literacy Assessment and Intervention</td>
</tr>
<tr>
<td></td>
<td>CIED 5162 Applied Practicum</td>
</tr>
</tbody>
</table>

**2.7 GPA cumulative and admission to Stage III required for these courses.**

† A grade of C or better is required for these courses.
The Department of Curriculum and Instruction offers programs that prepare candidates for initial teacher licensure in grades PreK-4th grade. Students enrolled in this program (B.S.E. licensure) have two options. Students can (1) choose to enter the B.S.E. program on the University of Arkansas campus in Fayetteville, or (2) participate in this program through a partnership with NorthWest Arkansas Community College (NWACC) in Bentonville. The first two years of option 2 (NWACC/UA split) will be completed at the community college and will culminate in an Associate’s Degree. The University of Arkansas junior and senior level courses are held at the UA Global Campus which is housed in the Pinnacle Center One Building in Rogers.

Admission to the Elementary Licensure Program is competitive and occurs after completion of all Pre-Childhood Education requirements and prior to the beginning of the fall semester of the junior year. Not all applicants who meet the minimum requirements will be admitted to the program. Applications to the Elementary Licensure (ELEL) program must be submitted by January 30. At this point, applicants must decide which program option they will follow: either CHED BSE leading to MAT option or ELEL BSE licensure option. Both of these options are described on the application which can be found on the College of Education and Health Professions website at http://cied.uark.edu/2360.htm.

The application process includes:
1. Submission of program application
2. Submission of transcripts for all coursework
3. Oral interview
4. Submission of Writing and Editing Samples
5. Submission of passing score on Math, Reading, and Writing sections of Praxis I Exam

Stage II: Admission to the Elementary Licensure BSE (ELEL)

Admission to the Elementary Licensure Program is competitive and occurs after completion of all Pre-Childhood Education requirements and prior to the beginning of the fall semester of the junior year. Not all applicants who meet the minimum requirements will be admitted to the program. Applications to the Elementary Licensure (ELEL) program must be submitted by January 30. At this point, applicants must decide which program option they will follow: either CHED BSE leading to MAT option or ELEL BSE licensure option. Both of these options are described on the application which can be found on the College of Education and Health Professions website at http://cied.uark.edu/2360.htm.

The application process includes:
1. Submission of program application
2. Submission of transcripts for all coursework
3. Oral interview
4. Submission of Writing and Editing Samples
5. Submission of passing score on Math, Reading, and Writing sections of Praxis I Exam

Stage III: Requirements for Program Continuation and Student Teaching/Internship*

1. Maintain a minimum cumulative GPA of 2.7
2. Passing score on Praxis II, Early Childhood: Content Knowledge (10022)
3. Passing score on Student Teaching entrance portfolio
4. Complete the following courses with a “C” or better: COMM 1313, MATH 1203 or equivalent, ENGL 1013, and ENGL 1023
5. Obtain a passing score on the Math, Reading, and Writing sections of the Praxis I

Stage I: Pre-Childhood Education (PCHED) or NWACC Associate’s Degree

1. Complete all program pre-requisites on the UA campus or at NWACC including the first 62 or 63 hours of the 8-semester plan (see 8-semester table below)
2. Obtain a minimum of 2.7 GPA on UA (NWACC coursework if choosing the off campus option) coursework

NOTE: Enrollment in the M.A.T. with an emphasis in childhood education is limited. A passing score on the appropriate Praxis test is a requirement to begin the M.A.T. A passing score on an additional Praxis test is a requirement to graduate from the M.A.T. (Students must consult with their advisers to determine the appropriate Praxis exams to take for admission and graduation.) Other specific application procedures and selection criteria are available in the Department of Curriculum and Instruction, 214 Peabody Hall or from childhood education faculty advisers.

ELEMENTARY EDUCATION (ELEL)

Lindsey Swagerty
Adviser
479-619-4304
lmswager@uark.edu

The Department of Curriculum and Instruction offers programs that prepare candidates for initial teacher licensure in grades PreK-4th grade. Students enrolled in this program (B.S.E. licensure) have two options. Students can (1) choose to enter the B.S.E. program on the University of Arkansas campus in Fayetteville, or (2) participate in this program through a partnership with NorthWest Arkansas Community College (NWACC) in Bentonville. The first two years of option 2 (NWACC/UA split) are offered at the community college and will culminate in an Associate’s Degree. The University of Arkansas junior and senior level courses are held at the UA Global Campus which is housed in the Pinnacle Center One Building in Rogers.

Admission to the Elementary Licensure B.S.E. is competitive and consists of a three-stage process. Admission will be determined by the Childhood Education faculty based on the 5 items listed below in Stage II.

Stage I: Pre-Childhood Education (PCHED) or NWACC Associate’s Degree

1. Complete all program pre-requisites on the UA campus or at NWACC including the first 62 or 63 hours of the 8-semester plan (see 8-semester table below)
2. Obtain a minimum of 2.7 GPA on UA (NWACC coursework if choosing the off campus option) coursework

NOTE: Enrollment in the M.A.T. with an emphasis in childhood education is limited. A passing score on the appropriate Praxis test is a requirement to begin the M.A.T. A passing score on an additional Praxis test is a requirement to graduate from the M.A.T. (Students must consult with their advisers to determine the appropriate Praxis exams to take for admission and graduation.) Other specific application procedures and selection criteria are available in the Department of Curriculum and Instruction, 214 Peabody Hall or from childhood education faculty advisers.

Stage II: Admission to the Elementary Licensure BSE (ELEL)

Admission to the Elementary Licensure Program is competitive and occurs after completion of all Pre-Childhood Education requirements and prior to the beginning of the fall semester of the junior year. Not all applicants who meet the minimum requirements will be admitted to the program. Applications to the Elementary Licensure (ELEL) program must be submitted by January 30. At this point, applicants must decide which program option they will follow: either CHED BSE leading to MAT option or ELEL BSE licensure option. Both of these options are described on the application which can be found on the College of Education and Health Professions website at http://cied.uark.edu/2360.htm.

The application process includes:
1. Submission of program application
2. Submission of transcripts for all coursework
3. Oral interview
4. Submission of Writing and Editing Samples
5. Submission of passing score on Math, Reading, and Writing sections of Praxis I Exam

Stage III: Requirements for Program Continuation and Student Teaching/Internship*

1. Maintain a minimum cumulative GPA of 2.7
2. Passing score on Praxis II, Early Childhood: Content Knowledge (10022)
3. Passing score on Student Teaching entrance portfolio
4. Complete the following courses with a “C” or better: COMM 1313, MATH 1203 or equivalent, ENGL 1013, and ENGL 1023
5. Obtain a passing score on the Math, Reading, and Writing sections of the Praxis I

Stage I: Pre-Childhood Education (PCHED) or NWACC Associate’s Degree

1. Complete all program pre-requisites on the UA campus or at NWACC including the first 62 or 63 hours of the 8-semester plan (see 8-semester table below)
2. Obtain a minimum of 2.7 GPA on UA (NWACC coursework if choosing the off campus option) coursework

NOTE: Enrollment in the M.A.T. with an emphasis in childhood education is limited. A passing score on the appropriate Praxis test is a requirement to begin the M.A.T. A passing score on an additional Praxis test is a requirement to graduate from the M.A.T. (Students must consult with their advisers to determine the appropriate Praxis exams to take for admission and graduation.) Other specific application procedures and selection criteria are available in the Department of Curriculum and Instruction, 214 Peabody Hall or from childhood education faculty advisers.
University of Arkansas Childhood Education Courses

Any 3-hour Elective
3
CIED 3023 Survey of Exceptionalities
3
CIED 3033 Classroom Learning Theory
3
CIED 3003 Early Childhood Education
3
CIED 3001 Early Childhood Education: Practicum
1
CIED 3103 Children’s Literature
3
CIED 3123 Mathematics Methods
3
CIED 3113 Emergent and Developmental Literacy
3
CIED 4113 Integrated Communication Skills
3
CIED 3143 Teaching Science
3
CIED 3133 Integrated Social Studies
3
CIED 4101 Practicum
3
CIED 3263 Language Development for Educators
3
CIED 4143 Curriculum Design
3
CIED 4323 Instructional Design for Teachers
3
CIED 4173 Student Teaching (two semesters)
3
CIED 4153 Classroom Management
3
CIED 4133 Measurement, Research, and Readings
3
CIED 4163 Senior Project
3
CIED 4003 Elementary Seminar
3
CIED 4423 Teaching a Second Language
3

Total 124 Hours

Elementary Education B.S.E.

Ten-Semester Degree Program

Students completing this program have 2 options. The first option involves students entering the ELEL program on the University of Arkansas campus in Fayetteville. Students who choose the second option (NWACC/UA split) will participate in the ELEL program through a partnership with Northwest Arkansas Community College (NWACC) in Bentonville. The first two years of the program are offered at the community college and will culminate in an Associate’s Degree. The University of Arkansas junior and senior level courses are held at the UA Global Campus which is housed in the Pinnacle Center One Building in Rogers.

Fall Semester Year 1
3 ENGL 1013 English Composition I
3 MATH 1203 College Algebra or equivalent
4 BIOL 1544 Principles of Biology/Lab
3 HIST 2003 or 2013 U.S. History
3 University Core Fine Arts
16 Semester hours

Spring Semester Year 1
3 ENGL 1023 English Composition II
3 MATH 2213 Survey of Math Structures I
3 COMM 1313 Public Speaking
2 CIED 1002 Introduction to Education
1 CIED 1001 Introduction to Education: Practicum
3 PSYC 2003 General Psychology
15 Semester hours

Fall Semester Year 2
4 University Core Physical science course with lab
3 University Core Humanities
3 MATH 2223 Survey of Math Structures II
3 PLSC 2003 American National Government
3-4 Electives (additional science course suggested for on campus students; CHED 1003 suggested for off campus students)
16-17 Semester hours

Spring Semester Year 2
3 CIED 1003 Introduction to Technology in Education or any 3-hour computer course (ETEC 2003 Educational Technology w/lab recommended for off campus)
3 HIST 3383 Arkansas and the Southwest or any 3-hour Arkansas History course
3 Any Geography Course
3 HESC 2433 Child Development
3 Elective
15 Semester hours*

Summer Semester Year 2
3 CIED 3023 Survey of Exceptionalities

Fall Semester Year 3
3 CIED 3033 Classroom Learning Theory
3 CIED 3263 Language Development for the Educator
3 CIED 3143 Teaching Science in the Elementary Grades
3 CIED 3003 Early Childhood Education
3 CIED 3001 Early Childhood Education: Practicum
3 CIED 3103 Children’s Literature
16 Semester hours

Spring Semester Year 3
3 Elective
3 CIED 3123 Mathematics Methods
3 CIED 3113 Emergent and Develop Literature
3 CIED 3133 Integrated Social Studies
1 CIED 4101 Practicum
3 CIED 4153 Classroom Management
16 Semester hours

Summer Semester Year 3
3 CIED 4113 Integrated Communication Skills
3 Semester hours

Fall Semester Year 4
3 CIED 4173 Student Teaching
3 CIED 4153 Classroom Management
3 CIED 4003 Elementary Seminar
3 CIED 4423 Teaching a Second Language
12 Semester hours

124-125 Total Hours

* B.S.E. students choosing the NWACC/UA split option will apply to the University of Arkansas and request the transfer of freshman and sophomore credits to UA during the semester before their junior year. UA accepts transfers of no more that 68 lower division credit hours. Taking freshman or sophomore courses directly from UA (as a correspondence course) may prevent you from exceeding this 68 credit-hour transfer limit.

See Page 331 for Curriculum and Instruction (CIED) courses.

ELEANOR MANN SCHOOL OF NURSING (NURS)

Nan Smith-Blair
Director

Lepaine Sharp-McHenry
Assistant Director

Epley Center for Health Professions
479-575-3904
nursing@uark.edu

FACULTY

• Professors Kippenbrock, Neighbors
• Associate Professors Barta, Smith-Blair
• Assistant Professors Jarrett, Larson, Odell, Osborne
• Instructors Agana, Gentry, Lee, Malm, Miller, Oelke, Scott, Sharp-McHenry, Sisson, Stroud, Patton, Vowell-Johnson, Wleklinski

The mission of the Eleanor Mann School of Nursing is to promote the health of
society through education of professional nurses, research, and service. In recognition of the interrelationship between teaching, research, service, and the practice of nursing, in the changing health care needs of society, the faculty aspires toward excellence in teaching, contributes to research in nursing, and promotes improved health care.

Professional nursing begins with a Bachelor of Science degree. Nursing education offers a research base for nursing practice that promotes the ability of the nurse to effect change needed to improve health. In the study of professional nursing, the student builds on a planned general education for the academic disciplines and acquires theoretical and specific knowledge to meet health care needs. In addition, the curriculum provides opportunity for students with technical nursing education to expand their knowledge and scope of practice. The baccalaureate program establishes a foundation for graduate education in nursing and for continued personal and professional development. The curriculum provides the student with a theoretical base to practice professional nursing with diverse clients in various settings through the roles of caregiver, manager, and teacher. The program of study has been designed to emphasize one or more of these roles in each nursing course.

Graduates of the program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN) for licensure as a registered nurse (R.N.). Persons convicted of a crime may not be eligible to take the NCLEX-RN examination. A criminal background check is required before admission to the program and before graduation. A negative drug screen must be submitted prior to admission and each semester while in the program. The Bachelor of Science in Nursing degree (B.S.N.) is awarded after successful completion of the nursing curriculum.

ADMISSION TO THE B.S.N. PROGRAM

Admission Policies

Conditional Admission to the B.S.N. Program

Admission to the B.S.N. program is limited. Conditional admission will be determined by the Eleanor Mann School of Nursing faculty. Admission requirements for the professional program of study are as follows:

1. Overall minimum grade-point average (GPA) of 3.00. The GPA is the most important factor for admission selection.
2. Students will be ranked according to GPA and selected for conditional admission to the program based on GPA rank.
3. The GPA will be computed on all prerequisite courses for nursing only, whether they are from the University of Arkansas or transfer hours.
4. If the student is a second degree student, an additional 0.1 point will be added to the GPA for the student for admission ranking.
5. Applications for admission must be submitted between November 15 and January 15 to be considered for fall semester admission and between April 15 and June 1 for spring semester admission. Late applications will be considered on a space-available basis.
6. Students must meet the performance standards for the professional program of study.
7. Students transferring from another nursing program must provide a letter from the nursing program that they are eligible to return and are in good standing to be considered for admission.
8. Letter of Intent to be considered for admission must be received in the EMSON office by date specified in admission letter.

Full Admission to the B.S.N. Program

Full admission to the Eleanor Mann School of Nursing is contingent upon meeting the conditional requirements and successfully meeting the following requirements:

1. All prerequisite coursework for a fall admission into the Professional Program of Study in Nursing must be completed by the end of the spring semester with the exception of the three pre-nursing courses (NURS 2012, NURS 2022, NURS 2032; these courses are not required for the online RN-BSN Program), which may be taken in the summer session prior to entering the program of study in nursing in the fall. (All coursework for spring admission must be completed by the end of the fall semester prior to entering the Professional Program of Study in Nursing in the spring.)
2. Proof of the following:
   a) CPR certification (American Heart Association Basic Certified Life Support and Automated Emergency Defibrillation CPR for Health Care Providers)
   b) Completed Hepatitis B vaccine with dates of each injection or immune titer if vaccine received 10 years ago. Three (3) HBV injections are needed. Students are required to have obtained HBV Injection 1 within two weeks of the beginning of the scheduled semester, followed by Injection 2 in one month, and Injection 3 within six months of Injection 1, in order to enter the clinical setting. A student who fails to obtain the complete series (3 injections), according to the Center for Disease Control (CDC) established timeframe, will not be permitted to participate in patient care contact required in clinical experiences.
   c) Negative Tuberculin skin test or negative T-Spot test, if T-Spot is positive, a chest X-ray must be completed and updated yearly.
   d) Diphtheria-Tetanus (DT) required.
   e) Varicella required and (any other immunizations that may be required by clinical agencies)
   f) MMR required and (any other immunizations that may be required by clinical agencies)
   g) A criminal background check is required. Results will be reported to the college administration and school officials and any health-care facility in which the students are placed as part of the clinical education. An unsatisfactory background check result may lead to denial of admission to the nursing program. The criminal background check must be completed by prior to the first day of class.
   h) A negative drug screen is required within two weeks prior to entrance into the nursing program. Results are reported to the Eleanor Mann School of Nursing. A positive drug screen will lead to denial of admission to the nursing program. Student failure to submit to a drug screen, attempting to tamper with, contaminate, or switch a sample will result in the student not being admitted to the nursing program and will be referred to the Dean of Students in the Division of Student Affairs at the University of Arkansas.
   i) Procedures for the criminal background check and the drug screen are available on the Eleanor Mann School of Nursing Web site: http://nurs.uark.edu/4208.htm.

R.N. to B.S.N. Admission Policies

1. Complete university admission requirements.
2. Complete Eleanor Mann School of Nursing admission requirements.
3. Completion of the general education studies.
4. Graduation from an Arkansas State Board of Nursing approved program and NLNAC-accredited program.
5. Proof of, and maintenance of, unencumbered licensure to practice as a Registered Nurse in Arkansas and any other state.
6. Credit for courses listed below will be held in escrow. The student will receive credit for these courses upon successful completion of the program.
   NURS 2032
   NURS 3313
   NURS 3422/3424
   NURS 3634/3644
   NURS 3742/3752
   NURS 4154/4164
   NURS 4262
   NURS 4442/4452
   Total Credit Hours of Escrow (37)
7. Professional nursing courses for R.N. to B.S.N. students are delivered online through Global Campus.

L.P.N./L.P.T.N. to B.S.N. admission policies

1. College admission requirements.
2. Eleanor Mann School of Nursing admission policies.
3. All prerequisite coursework for a fall admission into the Professional Program
of Study in Nursing must be completed by the end of the spring semester with the exception of the three pre-nursing courses (NURS 2012, NURS 2022, NURS 2032), which may be taken in the summer session prior to entering the program of study in nursing in the fall. (All coursework for spring admission must be completed by the end of the fall semester prior to entering the Professional Program of Study in Nursing in the spring, as already required.)

4. Completion of an Arkansas State Board-approved L.P.N. or L.P.T.N. and an NLNAC accredited program.

5. Proof of, and maintenance of, an unencumbered license to practice as an L.P.N. or L.P.T.N. in the state of Arkansas or any other state.

6. Credit for courses listed below will be held in escrow. The student will receive credit for these courses upon successful completion of the program.

NURS 3313
NURS 2032
NURS 3422/3424

7. L.P.N. students may receive credit for NURS 3634/3644 through validation examination.

**Progression, Withdrawal, and Dismissal**

1. For progression in the nursing program, only grades of “C” or above will be accepted. Students who make less than a “C” may not progress into courses for which that course is a prerequisite until the course is repeated and the required minimum grade attained.

2. Students may repeat a specific nursing course only once. If a “D,” “F” or “W” is earned on the second attempt, the student will be required to withdraw from the School of Nursing.

3. No more than two nursing courses within the program of study may be repeated. If the student does not earn a grade of at least “C” upon repeating the course, the student may not enroll in any nursing courses or continue in the School of Nursing.

4. Students who do not pass the medication calculation examination with 100 percent on the third attempt will be administratively withdrawn from all clinical courses and a NURS 4712 Seminar in Nursing, if enrolled.

5. For students enrolled in NURS 3424 Professional Role Implementation 1: Caregiver - Failure to pass the Dosage Calculation Exam on the third attempt in NURS 3424 Professional Role Implementation 1 course will result in a failing grade for the course and will count in the 2 “D” policy.

**Professional Role Implementation Courses**

1. A student who needs to repeat a Professional Role Implementation Course must make petition to the Undergraduate Admission Committee and are encouraged to do so as soon as they are aware of the need to repeat a course.

2. Students will be readmitted on a space-available basis according to the following priority system:

   **Priority Groups for Placement in Required Clinical Courses**
   
   - **First Priority** – Continuing full-time students in good academic standing.
   - **Second Priority** – Continuing part-time students in good academic standing.
   - **Third Priority** – Students repeating a course due to an academic or clinical failure or were administratively withdrawn with a “W” for failing the medication calculation test who were unable to repeat a course for one or more semesters.
   - **Fourth Priority** – Students repeating a course due to an academic or clinical failure or were administratively withdrawn with a “W” for failing the medication calculation test who were in the preceding semester.
   
3. Spaces in clinical courses are limited and tightly controlled by accreditation, the Arkansas State Board of Nursing, and clinical agency policies. A student re-enrolling in a Professional Role Implementation Course (whether due to illness, course failure, part-time status, or other reasons) will not be assured a clinical placement space in subsequent courses.

4. NOTE: A student dismissed from a Professional Role Implementation Course due to safety, ethical, or dishonesty issues will be administratively withdrawn from all clinical courses, and may be subject to administrative withdrawal from the School of Nursing following full review. Readmission is not guaranteed to these students.

**Readmission Policies**

Any student whose enrollment in the professional program of study has been interrupted may seek readmission following the steps below:

1. Seek readmission into the University of Arkansas (if applicable).

2. Complete Readmission Application to the School of Nursing during the application periods. (Readmission is limited by space availability).

3. Readmission will not be considered for any student dismissed from the School of Nursing who obtained a “D” or “F” from two (2) nursing courses or who was dismissed from a Professional Role Implementation Course due to safety, ethical, or dishonesty issues. Exceptions to this policy will be considered by the Undergraduate Admissions Committee on an individual basis.

**Exit Policies**

1. Students must complete the requirements for the degree within five years of enrolling in the first upper-division nursing course. If the student does not complete the Professional Program of Study within the five-year limit, nursing credits must be reevaluated.

2. All University of Arkansas requirements must be met.

   **NOTE:** In addition to the program requirements, students must meet the University and college graduation requirements. This curriculum is subject to change to comply with national accreditation and the Arkansas State Board of Nursing Standards.

**Requirements for Bachelor of Science in Nursing**

<table>
<thead>
<tr>
<th>University Core (State Minimum Core)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>English (6 hours)</em></td>
<td>35</td>
</tr>
<tr>
<td><em>ENGL 1013 English Composition I</em></td>
<td></td>
</tr>
<tr>
<td><em>ENGL 1023 English Composition II</em></td>
<td></td>
</tr>
<tr>
<td><em>Mathematics (3 hours)</em></td>
<td></td>
</tr>
<tr>
<td><em>MATH 1203 College Algebra or equivalent</em></td>
<td></td>
</tr>
<tr>
<td><em>Sciences with Labs (8 hours) must include</em></td>
<td></td>
</tr>
<tr>
<td><em>4 hours of CHEM including a lab (Must be CHEM 1073/1071L or higher)</em></td>
<td></td>
</tr>
<tr>
<td><em>BIOI 2443/2441L Human Anatomy</em>**</td>
<td></td>
</tr>
<tr>
<td><em>Fine Arts/Humanities (6 hours)</em></td>
<td></td>
</tr>
<tr>
<td>Must include one of the following courses:*</td>
<td></td>
</tr>
<tr>
<td>*PHIL 2003 Intro to Philosophy; *PHIL 2103 Intro to Ethics; *PHIL 2203 Logic; or <em>PHIL 3103 Ethics and the Professions</em></td>
<td></td>
</tr>
<tr>
<td><em>3 hours Core History/Government</em></td>
<td></td>
</tr>
<tr>
<td><em>Social Sciences (9 hours)</em></td>
<td></td>
</tr>
<tr>
<td>Must include:* HESC 1403 Lifespan Development</td>
<td></td>
</tr>
</tbody>
</table>

**Additional General Studies**

| 29 |
| *BIOL 2213/2211L Human Physiology* | |
| *EDFD 2403 Statistics in Nursing, or *PSYC 2013 Introduction to Statistics for Psychiatric, or *STAT 2303 Principles of Statistics or STAT 2023 Biostatistics* | |
| *BIOL 2013/2011L General Microbiology* | |
| *NURS 2012 Nursing Informatics* | |
| *NURS 2022 Intro. to Professional Nursing Concepts* | |
| *NURS 2032 Therapeutic Comm.* | |
| *12 elective hours (as needed)* | |
| *Denotes pre-requisite nursing courses that GPA will be computed on for admission into the Eleanor Mann School of Nursing, whether they are from the University of Arkansas or transfer hours.* | |
**BIOL 1543/1541L is a prerequisite for BIOL 2013/2011L and BIOL 2443/2441L and may be used as part of the elective hours.**

### Professional Nursing Program

#### Role Development (Level I)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 3313</td>
<td>Pharmacology in Nursing</td>
</tr>
<tr>
<td>NURS 3314</td>
<td>Pathophysiology</td>
</tr>
<tr>
<td>NURS 3321L</td>
<td>Health Assessment</td>
</tr>
<tr>
<td>NURS 3402</td>
<td>Nursing Concepts: Older Adult</td>
</tr>
<tr>
<td>NURS 3422</td>
<td>Nursing Concepts: Foundations of Professional Practice</td>
</tr>
<tr>
<td>NURS 3424</td>
<td>Professional Role Implementation I: Caregiver</td>
</tr>
<tr>
<td>NURS 3634</td>
<td>Nursing Concepts: Adult Health and Illness</td>
</tr>
<tr>
<td>NURS 3644</td>
<td>Professional Role Implementation II: Caregiver</td>
</tr>
<tr>
<td>NURS 3742</td>
<td>Nursing Concepts: Mental Health/Illness</td>
</tr>
<tr>
<td>NURS 3752</td>
<td>Professional Role Implementation III: Caregiver</td>
</tr>
<tr>
<td>NURS 3842</td>
<td>Research in Nursing</td>
</tr>
</tbody>
</table>

#### Role Concentration (Level II)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 4112</td>
<td>Teaching and Health Promotion</td>
</tr>
<tr>
<td>NURS 4154</td>
<td>Nursing Concepts: Children and Family</td>
</tr>
<tr>
<td>NURS 4164</td>
<td>Professional Role Implementation IV: Teacher</td>
</tr>
<tr>
<td>NURS 4242</td>
<td>Management in Nursing</td>
</tr>
<tr>
<td>NURS 4252</td>
<td>Professional Role Implementation V: Manager</td>
</tr>
<tr>
<td>NURS 4262</td>
<td>Nursing Concepts: Adult Health and Illness II</td>
</tr>
<tr>
<td>NURS 4442</td>
<td>Nursing Concepts: Critical Care</td>
</tr>
<tr>
<td>NURS 4452</td>
<td>Professional Role Implementation VI: Role Synthesis</td>
</tr>
<tr>
<td>NURS 4603</td>
<td>Nursing Concepts: Community</td>
</tr>
<tr>
<td>NURS 4613</td>
<td>Professional Role Implementation VII: Role Synthesis</td>
</tr>
<tr>
<td>NURS 4712</td>
<td>Seminar in Nursing</td>
</tr>
<tr>
<td>NURS 4722</td>
<td>Professional Role Implementation VIII: Role Synthesis</td>
</tr>
</tbody>
</table>

### Total for Nursing 124 hours

**NOTE:** The minimum number of hours required to receive a baccalaureate degree at the University of Arkansas is 124 semester hours. The Nursing major is exempt from the eight-semester degree plan since the program is admissions-based. There is no guarantee that a student meeting the minimal GPA requirement will be admitted. Please refer to the College of Education and Health Professions' Web site at http://nurs.uark.edu/index.htm for specific information related to the admission criteria.

### R.N. to B.S.N. Professional Nursing Program

(Pending approval from the Department of Higher Education)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 4003</td>
<td>Transition to Professional Nursing Practice</td>
</tr>
<tr>
<td>NURS 4013</td>
<td>Informatics for Professional Nursing</td>
</tr>
<tr>
<td>NURS 4112</td>
<td>Teaching and Health Promotion</td>
</tr>
<tr>
<td>NURS 4203</td>
<td>Leading and Managing in Healthcare Microenvironments</td>
</tr>
<tr>
<td>NURS 4323</td>
<td>Health Assessment and Clinical Reasoning for RNs</td>
</tr>
<tr>
<td>NURS 4603</td>
<td>Nursing Concepts: Communities</td>
</tr>
<tr>
<td>NURS 4710</td>
<td>Professional Nursing Synthesis</td>
</tr>
<tr>
<td>NURS 5053</td>
<td>Evidence-based Practice</td>
</tr>
<tr>
<td>NURS 5063</td>
<td>Health Care Policy</td>
</tr>
<tr>
<td>NURS 5143</td>
<td>Advanced Pathophysiology</td>
</tr>
</tbody>
</table>

### Credits Granted from Escrow

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 2032</td>
<td>Therapeutic Communication</td>
</tr>
<tr>
<td>NURS 3313</td>
<td>Pharmacology in Nursing</td>
</tr>
<tr>
<td>NURS 3422</td>
<td>Nursing Concepts: Foundations of Professional Practice</td>
</tr>
<tr>
<td>NURS 3424</td>
<td>Professional Role Implementation I: Caregiver</td>
</tr>
<tr>
<td>NURS 3634</td>
<td>Nursing Concepts: Adult Health and Illness</td>
</tr>
<tr>
<td>NURS 3644</td>
<td>Professional Role Implementation II: Caregiver</td>
</tr>
<tr>
<td>NURS 3742</td>
<td>Nursing Concepts: Mental Health/Illness</td>
</tr>
<tr>
<td>NURS 3752</td>
<td>Professional Role Implementation III: Caregiver</td>
</tr>
<tr>
<td>NURS 4154</td>
<td>Nursing Concepts: Children and Family</td>
</tr>
<tr>
<td>NURS 4164</td>
<td>Professional Role Implementation IV: Teacher</td>
</tr>
<tr>
<td>NURS 4262</td>
<td>Nursing Concepts: Adult Health and Illness II</td>
</tr>
<tr>
<td>NURS 4442</td>
<td>Nursing Concepts: Critical Care</td>
</tr>
<tr>
<td>NURS 4452</td>
<td>Professional Role Implementation VI: Role Synthesis</td>
</tr>
</tbody>
</table>

### Total for Nursing 124 hours

### Additional Studies

- **EDFD 2403 Statistics in Nursing,** or **PSYC 2013 Introduction to Statistics for Psychiatry,** or **STAT 2303 Principles of Statistics** or **STAT 2023 Biostatistics**
- **NURS 5053 Evidence-based Practice**
- **NURS 5063 Health Care Policy**
- **NURS 5143 Advanced Pathophysiology**

### Health, Human Performance and Recreation

**Dean Gorman**  
Assistant Department Head  
308 W HPER Building  
479-575-2850  
dgorman@uark.edu

The department offers programs leading to the B.S.E. degree with major emphasis in community health promotion, kinesiology, or recreation and athletic training. The department also offers coursework in dance activity.
DANCE ACTIVITY (DEAC)

FACULTY
• Instructor Mayes

See Page 341 for Dance Activity (DEAC) courses.

COMMUNITY HEALTH PROMOTION (CHLP)

FACULTY
• Professor Jones (C.)
• Associate Professors Hammig, Henry
• Assistant Professor Jozkowski
• Visiting Assistant Professors Mink, Rausch, Wyandt-Heibert

The program in community health promotion is designed to prepare candidates for a variety of career options in the field of community health promotion. Career opportunities may include planning, development, and delivery of health programs in various settings. These settings may include hospitals, government agencies, nonprofit organizations, community organizations, corporations, and other places of occupation. Graduates of this program should be well prepared to enter the work force at an entry-level position in community health or graduate programs of study in such areas as health education and health promotion, corporate health, public health, health care administration, and other allied health professional schools.

The candidate for the Bachelor of Science in Education degree with a major in community health promotion will focus on community health. All students must complete the University Core requirements as listed on page 41. In addition, all students must complete the courses listed below under required general studies for the community health promotion major and the additional community health promotion major requirements. A minimum of 124 semester hours is required for graduation in the major of community health promotion.

Curriculum for a Major in Community Health Promotion

<table>
<thead>
<tr>
<th>University Minimum Core (State Minimum Core) See page 41</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English (6-9 hours)</td>
<td></td>
</tr>
<tr>
<td>ENGL 1013 Composition I</td>
<td></td>
</tr>
<tr>
<td>ENGL 1023 Composition II</td>
<td></td>
</tr>
<tr>
<td>Mathematics (3 hours)</td>
<td></td>
</tr>
<tr>
<td>MATH 1203 College Algebra, equivalent or higher</td>
<td></td>
</tr>
<tr>
<td>Science (8 hours)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1543/1541L Principles of Biology</td>
<td></td>
</tr>
<tr>
<td>*CHEM 1103/1101L University Chemistry I and lab or CHEM</td>
<td></td>
</tr>
<tr>
<td>1123/1121L University Chemistry II and lab or</td>
<td></td>
</tr>
<tr>
<td>CHEM 1073/1071L Fundamentals of Chemistry and lab</td>
<td></td>
</tr>
<tr>
<td>See specific concentration requirements</td>
<td></td>
</tr>
<tr>
<td>Fine Arts/Humanities (6 hours)</td>
<td></td>
</tr>
<tr>
<td>See page 41 for listing of approved courses</td>
<td></td>
</tr>
<tr>
<td>U.S. History (3 hours)</td>
<td></td>
</tr>
<tr>
<td>HIST 2003 History of American People to 1877 or HIST 2013</td>
<td></td>
</tr>
<tr>
<td>History of American People 1877 to 1877 or PLSC 2003</td>
<td></td>
</tr>
<tr>
<td>American National Government</td>
<td></td>
</tr>
<tr>
<td>Social Sciences (9 hours)</td>
<td></td>
</tr>
<tr>
<td>PSYC 2003 General Psychology</td>
<td></td>
</tr>
<tr>
<td>SOCI 2013 General Sociology</td>
<td></td>
</tr>
<tr>
<td>3 hours Social Science core elective</td>
<td></td>
</tr>
</tbody>
</table>

Required general studies for the Health Science Major

| Literature Elective (3 hours)                             |       |
| COMM 1313 Public Speaking                                 |       |
| CHLP 1103 Personal Health and Safety                      |       |
| PEAC 1621 Fitness Concepts                                |       |

Health Science Major Requirements

| HESC 1213 Fundamentals of Nutrition                       |       |
| CHLP 1203 Prevention of Drug Abuse                        |       |
| CHLP 1303 Introduction to Human Sexuality                 |       |
| CHLP 2613 Foundations of Community Health                 |       |
| CHLP 2662 Terminology for the Health Professions          |       |
| CHLP 3643 Community Health Plan and Promotion            |       |
| CHLP 4043 Internship in Community Health                  |       |
| CHLP 4553 Environmental Health                            |       |
| CHLP 4603 Application of Health Behavior Theories in Health Education |       |
| CHLP 4623 Human Diseases or CHLP 4613 Principles of Epidemiology |       |
| CHLP 4643 Multicultural Health                           |       |
| JOUR 1033 Fundamentals of Journalism or ENGL 3053 Technical and Report Writing |       |
| BIOL 2013/2011L General Microbiology                      |       |
| PSYC 3093 Developmental Psychology                        |       |
| PSYC Elective except PSYC 2003 (3 hours)                  |       |
| BIOL 2213/2211L Human Physiology and lab                  |       |
| BIOL 2443/2441L Human Anatomy and lab                      |       |
| SCWK 3163 On Death and Dying                             |       |
| PSYC 4023 Adulthood and Aging, or SCWK 4183 Social Work   |       |
| with Elders                                              |       |
| Community Health Promotion-related electives (20 hours) to include: |       |
| 6 hours HHPR Departmental Electives                      |       |
| 9 hours General Electives                                 |       |
| 5 hours health-related Discipline Electives selected from PSYC, |       |
| STAT, SPAN, HESC, SCWK, COMM, CHLP                        |       |

Total Community Health Promotion degree 124

Community Health Promotion B.S.E.

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan for the Community Health Promotion major should see page 42 in the Academic Regulations chapter for university core requirements.

Fall Semester Year 1

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

Spring Semester Year 1

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

Fall Semester Year 2

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

Spring Semester Year 2

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>
The YOU of A
College of Education and Health Professions

The candidate for the Bachelor of Science in Education degree with a major in kinesiology.

KINESIOLOGY (KINS)

FACULTY

- University Professor Di Brezzo
- Professors Fort, Gorman, Hunt
- Associate Professor Urrug
- Clinical Associate Professor Kern
- Assistant Professor Ganio, Gray, Washington
- Clinical Assistant Professors Bonacci, Calleja, Smith-Nix, Sullivan
- Instructors Forbes, Mayes

The program in kinesiology is designed to prepare candidates for a variety of career options in the vast field of movement science. Career opportunities may include teaching physical education, coaching, analyzing and prescribing fitness programs, athletic training, or preparation for professional programs in allied health. Graduates of this program should be well prepared to enter graduate programs of study in such areas as pedagogy or adapted physical education, exercise physiology, biomechanics, athletic training, sport management, medical school, physical therapy school, and other allied health professional schools.

The candidate for the Bachelor of Science in Education degree with a major in kinesiology must select one of three concentrations:

1. P-12 Teaching Physical Education/Wellness & Leisure
2. Exercise Science – Pre-Professional Science
3. Applied Exercise Science

All students must complete the state minimum core requirements as listed in the University Core. In addition, all students must take the required general studies for the kinesiology major and the kinesiology core requirements listed below. As part of the University Core requirements, specific math and science courses are required within the kinesiology major and concentrations. A student preparing to teach in the public schools must select the P-12 teaching concentration and is required to meet the following gate checks: have a 2.3 cumulative GPA and present passing scores for all three parts of Praxis I to their adviser prior to taking the following 3000-level PHED Teaching courses: PHED 3001, 3002, 3022, 3032, 3043, 3074, 3373, and 3903. Cut off dates for presenting passing Praxis scores are July 1st for the Fall semester, December 1st for the Spring semester, and May 1st for any Summer session. Students are required to (1) have a “C” or better in all KINS/PHED Teacher Education classes (does not include KINS 9 hour core) in order to be eligible to enroll in the Senior Block Internship semester, (2) must have a cumulative grade point average of 2.5 or greater in a minimum 2.75 grade point average in KINS/PHED Teacher Education classes (does not include KINS 9 hour core) in order to be eligible to enroll in the Senior Block Internship semester, and (3) completed or registered to take the Praxis II content knowledge exam for Physical Education, Wellness and Leisure in order to be eligible to enroll in the Senior Block Internship semester. Students interested in obtaining an endorsement in coaching should contact the Coordinator of Teacher Education. Students applying for other post-baccalaureate programs should inquire as to prerequisite requirements. Students majoring in kinesiology with a concentration in exercise science (concentrations II, III) must earn a grade of “C” or better in KINS 3153, KINS 3353, and KINS 3533, and meet the appropriate concentration requirements. A minimum of 124 semester hours is required for graduation in the major of kinesiology.

Curriculum for all Majors in Kinesiology

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Core (State Minimum Core) See page 41</td>
</tr>
<tr>
<td>Required University Core for Kinesiology major</td>
</tr>
<tr>
<td>PSYC 2003 General Psychology</td>
</tr>
<tr>
<td>Required general studies for Kinesiology major</td>
</tr>
<tr>
<td>COMM 1313 Public Speaking</td>
</tr>
<tr>
<td>CHLP 1103 Personal Health and Safety</td>
</tr>
<tr>
<td>Kinesiology Core for all Kinesiology Majors</td>
</tr>
<tr>
<td>KINS 2223 Motor Development</td>
</tr>
<tr>
<td>KINS 3163 Exercise Physiology: Theory and Application or KINS 3153 Exercise Physiology (for P-12 concentration I)</td>
</tr>
<tr>
<td>KINS 3353 Mechanics of Human Movement</td>
</tr>
</tbody>
</table>

Concentration I: P-12 Teaching Physical Education/Wellness & Leisure

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1543/1541L Principles of Biology (hours counted in the state minimum core)</td>
</tr>
<tr>
<td>BIOL 2443/2441L Human Anatomy or adviser-approved A&amp;P 1 (hours could be counted in the state minimum core)</td>
</tr>
<tr>
<td>PHED 1003 The P.E. Profession: An Overview</td>
</tr>
<tr>
<td>PHED 2013 Teaching Progressions/Assessment of Basic Skills</td>
</tr>
<tr>
<td>PHED 2023 Teaching Progressions/Assessment of Advanced Skills</td>
</tr>
<tr>
<td>PHED 3001 Teaching Practicum</td>
</tr>
<tr>
<td>PHED 3002 Teaching and Leading Outdoor Recreation and Experiential Activities</td>
</tr>
<tr>
<td>PHED 3022 Teaching Stunts/Tumbling</td>
</tr>
<tr>
<td>PHED 3032 Teaching Rhythms</td>
</tr>
<tr>
<td>PHED 3043 Teaching Fitness</td>
</tr>
<tr>
<td>PHED 3074 Secondary Physical Education</td>
</tr>
<tr>
<td>PHED 3203 Principles and Problems of Coaching</td>
</tr>
<tr>
<td>PHED 3373 Elementary Physical Education</td>
</tr>
<tr>
<td>PHED 3702 Measurement Concepts in Kinesiology</td>
</tr>
<tr>
<td>PHED 3903 PE for Special Populations</td>
</tr>
<tr>
<td>KINS 3373 Phil/Soc Impact on Kinesiology</td>
</tr>
<tr>
<td>KINS 4413 Org/Man/Mkt Skills for Kinesiology Professional</td>
</tr>
<tr>
<td>CHLP 3633 First Responder &amp; First Aid</td>
</tr>
<tr>
<td>CIED 3033 Classroom Learning Theory</td>
</tr>
<tr>
<td>CNED 4003 Classroom Human Relations Skills or CNED 3053 The Helping Relationship</td>
</tr>
</tbody>
</table>
## Exercise Science Concentration II and III: Exercise Science Core

<table>
<thead>
<tr>
<th>Kinesiology Concentration II</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Professional Science (KINS EXPP)</td>
<td>40</td>
</tr>
<tr>
<td>University Core (State Minimum Core) See page 41</td>
<td>35</td>
</tr>
<tr>
<td>Required University Core for Kinesiology major</td>
<td>9</td>
</tr>
<tr>
<td>Required general studies for Kinesiology EXPP major</td>
<td>9</td>
</tr>
<tr>
<td>Kinesiology Courses for Kinesiology EXPP Majors</td>
<td>9</td>
</tr>
<tr>
<td>Exercise Science Core</td>
<td>42</td>
</tr>
<tr>
<td>BIOL 1543/5441L Principles of Biology (hours counted in the University minimum core)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2443/2441L Human Anatomy (hours counted in the University minimum core)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2213/2211L Human Physiology</td>
<td></td>
</tr>
<tr>
<td>CHEM 1103/1101L University Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1123/1121L University Chemistry II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2013/2011L College Physics I</td>
<td></td>
</tr>
<tr>
<td>PSYC 3023 Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>HESC 1213 Nutrition in Health</td>
<td></td>
</tr>
<tr>
<td>CHLP 2662 Terminology for Health Professionals</td>
<td></td>
</tr>
<tr>
<td>CNED 3053 The Helping Relationship</td>
<td></td>
</tr>
<tr>
<td>KINS 2733 Seminar in Exercise Science</td>
<td></td>
</tr>
<tr>
<td>KINS 3533 Laboratory Techniques</td>
<td></td>
</tr>
<tr>
<td>KINS 405V Independent Study (3 hrs.) or KINS 4903 Internship or HNED 400VH (3 hrs.) Honors Education Thesis/</td>
<td></td>
</tr>
<tr>
<td>Project if completing Honors Program</td>
<td></td>
</tr>
<tr>
<td>KINS 4323 Analytical Basis of Movement Science</td>
<td></td>
</tr>
<tr>
<td>KINS 4833 Exercise Appl/Special Populations</td>
<td></td>
</tr>
<tr>
<td>Additional requirements Concentration II: EXPP</td>
<td>18-19</td>
</tr>
<tr>
<td>BIOL 2013/2021L General Microbiology/Lab</td>
<td></td>
</tr>
<tr>
<td>PSYC 2013 Intro to Statistics for Psychology or STAT 2303</td>
<td></td>
</tr>
<tr>
<td>Principles of Statistics or SOCI 3303 Social Data Collection or</td>
<td></td>
</tr>
<tr>
<td>adviser-approved statistics course</td>
<td></td>
</tr>
<tr>
<td>MATH 2043 Survey of Calculus (hours counted in the state minimum core) or MATH 2554 Calculus</td>
<td></td>
</tr>
<tr>
<td>PHYS 2033/2031L College Physics II with lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 2613/2611L Organic Physiological Chemistry with lab or</td>
<td></td>
</tr>
<tr>
<td>CHEM 3603/3601L Organic Chemistry I with lab</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>10-11</td>
</tr>
<tr>
<td>Total hours EXPP degree</td>
<td>124</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kinesiology Concentration III – Applied Exercise Science (KINS EXAS)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Core (State Minimum Core) See page 41</td>
<td>35</td>
</tr>
<tr>
<td>Required University Core for Kinesiology major</td>
<td>10</td>
</tr>
<tr>
<td>Required general studies for Kinesiology EXAS major</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology Courses for Kinesiology EXAS Majors</td>
<td>9</td>
</tr>
<tr>
<td>Exercise Science Core</td>
<td>40</td>
</tr>
<tr>
<td>BIOL 1543/5441L Principles of Biology (hours counted in University minimum core)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2443/2441L Human Anatomy (hours counted in University minimum core)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2213/2211L Human Physiology</td>
<td></td>
</tr>
<tr>
<td>CHEM 1103/1101L University Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1123/1121L University Chemistry II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2013/2011L College Physics I</td>
<td></td>
</tr>
<tr>
<td>PSYC 3023 Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>PEAC 1621 Fitness Concepts</td>
<td></td>
</tr>
<tr>
<td>3 hour Literature elective</td>
<td></td>
</tr>
<tr>
<td>Exercise Science Core</td>
<td>40</td>
</tr>
<tr>
<td>BIOL 1543/5441L Principles of Biology (hours counted in University minimum core)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2443/2441L Human Anatomy (hours counted in University minimum core)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2213/2211L Human Physiology</td>
<td></td>
</tr>
<tr>
<td>CHEM 1103/1101L University Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1123/1121L University Chemistry II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2013/2011L College Physics I</td>
<td></td>
</tr>
<tr>
<td>PSYC 3023 Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>HESC 1213 Nutrition in Health</td>
<td></td>
</tr>
<tr>
<td>CNED 3053 The Helping Relationship</td>
<td></td>
</tr>
<tr>
<td>KINS 2733 Seminar in Exercise Science</td>
<td></td>
</tr>
<tr>
<td>KINS 3533 Laboratory Techniques</td>
<td></td>
</tr>
<tr>
<td>KINS 405V Independent Study (3 hrs.) or KINS 4903 Internship or HNED 400VH (3 hrs.) Honors Education Thesis/</td>
<td></td>
</tr>
<tr>
<td>Project if completing Honors Program</td>
<td></td>
</tr>
<tr>
<td>KINS 4323 Analytical Basis of Movement Science</td>
<td></td>
</tr>
<tr>
<td>KINS 4833 Exercise Appl/Special Populations</td>
<td></td>
</tr>
<tr>
<td>Additional requirements Concentration III: EXAS</td>
<td>11</td>
</tr>
<tr>
<td>MATH 1203 College Algebra or equivalent (hours counted in the state minimum core)</td>
<td></td>
</tr>
<tr>
<td>MATH 1213 Plane Trigonometry</td>
<td></td>
</tr>
<tr>
<td>CHLP 2662 Terminology for Health Professionals</td>
<td></td>
</tr>
<tr>
<td>CHLP 3633 First Responder-First Aid</td>
<td></td>
</tr>
<tr>
<td>KINS 4773 Performance and Drugs</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>21</td>
</tr>
<tr>
<td>Total hours EXAS degree</td>
<td>124</td>
</tr>
</tbody>
</table>
### Kinesiology B.S.E., P-12 Concentration I

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan in Kinesiology should see page 42 in the Academic Regulations chapter for university requirements of the program.

<table>
<thead>
<tr>
<th>Semester Year</th>
<th>Courses</th>
</tr>
</thead>
</table>
| Fall Semester Year 1 | 3 ENGL 1013 Composition I  
3 Social Science (except PSYC 2003)  
4 BIOL 1543/1541L Principles of Biology w/Lab  
3 CHLP 1105 Personal Health and Safety  
3 PHED 1003 The P.E. Profession: An Overview |
| Spring Semester Year 1 | 3 ENGL 1023 Composition II  
3 MATH 1203 College Algebra (or higher)  
3 COMM 1313 Public Speaking  
3 U.S. History or American Nat. Government  
3 PHED 2013 Tch Progress and Assess./Basic Skills |
| Fall Semester Year 2 | 3 KINS 2223 Motor Development  
3 PSYC 2003 General Psychology  
3 Literature Elective  
3 FA/Humanities  
4 BIOL 2443/2241L Human Anatomy with lab or adviser-approved A&P 1 (which meets State Minimum Core) |
| Spring Semester Year 2 | 2 PHED 3032 Teaching Rhythms  
3 Social Science (except PSYC 2003)  
3 PHED 2023 Teaching Progression and Assessment/Adv. Skills  
3 CIED 3033 Classroom Learning Theory  
2 PHED 3002 Outdoor Recreation and Experiential Activities  
3 Fine Arts or Humanities |
| Fall Semester Year 3 | 3 PHED 3773 Elementary Physical Education  
3 PHED 3003 Physical Education for Special Populations  
3 CNED 4003 Classroom Human Relationship Skills or CNED 3053 The Helping Relationship  
3 KINS 3163 Exercise Physiology; Theory and Application or KINS 3153 Exercise Physiology  
3 CHLP Elective |
| Spring Semester Year 3 | 4 PHED 3074 Secondary Physical Education (must take with PHED 3702)  
2 PHED 3702 Measurement in Kinesiology (must take with PHED 3074)  
3 PHED 3043 Teaching Fitness  
2 PHED 3022 Teaching Stunts and Tumbling  
3 KINS 3353 Mechanics of Human Movement  
1 CHLP Elective |
| Fall Semester Year 4 | 1 PHED 3001 Practicum  
3 PHED 3203 Prin. of Coaching  
3 KINS 4413 Org./Man./Mkt. Skills for the KINS Professional  
3 HLSC 3633 First Responder o First Aid  
3 KINS 3373 Philosophical/Sociocultural Impact of Kinesiology  
2 CHLP Elective |
| Spring Semester Year 4 | 3 PHED 4023 Class Management  
9 PHED 407V Physical Education Teaching Internship  
3 PHED 4263 Professional Issues in Physical Ed.  
1 PHED 4731 Senior Seminar |

**Total Hours**

124

† Core areas must be completed as outlined in University Core – See page 41.

### Kinesiology B.S.E., Pre-Professional Concentration II

**Eight-Semester Degree Program**

Students wishing to follow the eight-semester degree plan in Kinesiology should see page 42 in the Academic Regulations chapter for university requirements of the program.

<table>
<thead>
<tr>
<th>Semester Year</th>
<th>Courses</th>
</tr>
</thead>
</table>
| Fall Semester Year 1 | 3 ENGL 1013 Composition I  
4 CHEM 1103/1101L University Chemistry I with lab  
3 CHLP 1105 Personal Health & Safety  
3 Fine Arts or Humanities  
4 BIOL 1543/1541L Principles of Biology with lab |
| Spring Semester Year 1 | 3 ENGL 1023 Composition II  
3-4 MATH 2043 Survey of Calculus; Math 2554 Calculus I  
3 Fine Arts or Humanities  
4 CHEM 1123/1121L University Chemistry II with lab  
3 Social Science (except PSYC 2003) |
| Fall Semester Year 2 | 3 COMM 1313 Public Speaking  
3 KINS 2733 Seminar in Exercise Science  
3 KINS 2223 Motor Development  
3-4 Electives or **CHEM 3603/3601L Organic Chemistry I  
4 BIOL 2443/2241L Human Anatomy with lab |
| Spring Semester Year 2 | 3 Approved elective  
3 PSYC 2003 General Psychology  
3 U.S. History or American National Government  
3-4 Approved Electives or ***CHEM 2613/2611L Organic Physiological Chemistry I  
4 BIOL 2213/2211L Human Physiology with lab |
| Fall Semester Year 3 | 4 PHYS 2013/2011L College Physics I with lab  
3 KINS 3153 Exercise Physiology  
3 CNED 3053 The Helping Relationship  
4 BIOL 2013/2011L General Microbiology with lab |
| Spring Semester Year 3 | 4 PHYS 2033/2031L College Physics II with lab  
3 KINS 3533 Laboratory Techniques  
3 HESC 1213 Nutrition and Health  
3 KINS 3353 Mechanics of Human Movement  
2 CHLP 2662 Terminology for Health Professions |
| Fall Semester Year 4 | 3 PSYC 2013 Statistics or STAT 2303 or SOCI 3303  
3 KINS 4833 Exercise Application/Special Populations  
3 PSYC 4183 Behavioral Neuroscience or PSYC 4923 Brain and Behavior or BIOL 4793 into Neurobiology  
3-6 Electives  
3 Literature Elective (recommend WLIT I) |
| Spring Semester Year 4 | 3 KINS 4323 Analytical Basis/Movement  
3 KINS 4413 Org./Man./Mkt. Skills for the KINS Professional  
3 KINS 2733 Seminar in Exercise Science  
3 PSYC Abnormal Psychology  
3 Social Science (except PSYC 2003) |

**Total Hours**

124

† Core areas must be completed as outlined in University Core – See page 41.

* BIOL 1543/1541L is a prerequisite for BIOL 2443/2241L

** Only for students completing the College of Education and Health Professions Honors Program.

*** Preprofessional program requires either CHEM 2613/2611L or CHEM 3603/3601L. Must be taken fall or spring semester of second year.
Kinesiology B.S.E., Applied Exercise Science Concentration III

Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan in Kinesiology should see page 42 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1
- ENGL 1013 Composition I
- CHEM 1103/1101L University Chemistry I with lab
- MATH 1203 College Algebra
- ♦ Fine Arts or Humanities
- BIOL 1543/1541L Principles of Biology with lab

17 Semester Hours

Spring Semester Year 1
- ENGL 1023 Composition II
- MATH 1213 Plane Trigonometry
- ♦ Fine Arts or Humanities
- CHEM 1123/1121L University Chemistry II with lab
- ♦ Social Science (except PSYC 2003)

16 Semester Hours

Fall Semester Year 2
- COMM 1313 Public Speaking
- KINS 2733 Seminar in Exercise Science
- KINS 2223 Motor Development
- CHLP 1103 Personal Health and Safety
- BIOL 2443/2441L Human Anatomy with lab

16 Semester Hours

Spring Semester Year 2
- PSYC 2003 General Psychology
- ♦ U.S. History or American National Government
- CHLP 2662 Terminology for Health Professions
- 4-6 Approved Electives
- BIOL 2213/2211L Human Physiology with lab

16-18 Semester Hours

Fall Semester Year 3
- PHYS 2013/2011L College Physics I with lab
- KINS 3153 Exercise Physiology
- CNEP 3033 The Helping Relationship
- PEAC 1621 Fitness Concepts
- 3-4 Elective

14-15 Semester Hours

Spring Semester Year 3
- KINS 3533 Laboratory Techniques
- HESC 1213 Nutrition and Health
- KINS 3353 Mechanics of Human Movement
- Literature Elective (recommend WLIT I)
- 3 Elective

15 Semester Hours

Fall Semester Year 4
- KINS 4903 Internship or KINS 405V Independent Study or ♦ HNED 4003H Honors Education Thesis/Project
- KINS 4833 Exercise Application/Special Populations
- PSYC Abnormal Psychology
- ♦ Social Science
- 4 Elective

16 Semester Hours

Spring Semester Year 4
- KINS 4323 Analytical Basis/Movement
- KINS 4773 Performance and Drugs
- CHLP 3633 First Responder-First Aid
- 0-6 Electives

9-15 Semester Hours

124 Total Hours

† Core areas must be completed as outlined in University Core – See page 41. ♦ Fine Arts or Humanities
BIOL 1543/1541L is a prerequisite for BIOL 2443/2441L
** Only for students completing the College of Education and Health Professions Honors Program.

See Page 373 for Kinesiology (KINS) courses.

RECREATION AND SPORT MANAGEMENT (RESM)

FACULTY
- ♦ Professor Moiseichik
- Associate Professor Langsner
- Assistant Professors Benton, Dittmore

The program in recreation and sport management is designed to prepare candidates for a variety of career opportunities in the field of recreation and sport management. Career opportunities may include park and recreation directors for a city, college and professional sports management, fitness center managers, state and national park managers, camp administrators, or work in YMCAs, Boys and Girls Clubs, or other youth-serving agencies. Graduates of this program should be well prepared to enter the recreation and sport workforce at an entry level position or pursue graduate studies in such areas as recreation management, sport management, or other allied health professional schools.

The candidate for the Bachelor of Science in Education degree with a major in recreation and sport management must select professional electives in an area of interest with help from an academic advisor from the recreation and sport management faculty. Each set of professional electives is developed individually to meet specific career goals. Professional electives are 24 hours, generally in academic areas other than the recreation and sport management program. Examples of professional electives include, but are not limited to, public recreation, children and families, fitness club management, commercial recreation, special event management, camp administration, outdoor leadership, community sports, sport management, youth at risk, and outdoor recreation.

All students must complete the University Core requirements as listed on page 41. In addition, all students must take the required general studies for the recreation and sport management core requirements listed below. Recreation and sport management majors must obtain a “C” or better in all courses beginning with the alpha code RESM. To enroll in RESM 440V, students must have a 2.50 GPA or better in RESM core and professional elective courses.

There are several experiential requirements within the recreation and sport management core. Students are required to do three practicum experiences (RESM 201V) in three different agencies. Each experience totals 45 hours. A more intense experience of an internship (RESM 440V) requires a minimum of 400 hours or work full time for 12-15 weeks in an agency with a qualified park, recreation or sport management professional. Students in the recreation and sport management program must obtain one instructor-level certification and a second certification in another area of expertise, which must be appropriate to recreation and sport management and be pre-approved by the program. For additional information regarding these certifications see a recreation and sport management faculty advisor. Certifications must be valid at the time of graduation and be completed before a grade will be assigned in RESM 4013.

An undergraduate minor in recreation and sport management is also available to students enrolled in other majors. Students with interests related to the recreation and sport management profession such as business, biology, human environmental science, or horticulture may elect the 15-hour minor. This minor could enhance future career opportunities.

Curriculum for a Major in Recreation and Sport Management

University Minimum Core (State Minimum Core) Hours 35
Required University Core for Major in Recreation and Sport Management
- PLSC 2003 American National Government
- PSYC 2003 General Psychology
- SOCI 2013 General Sociology

Required General Studies for the Recreation and Sport Management Major
- 3-hour Literature/History/Western Civilization elective
- COMM 1313 Public Speaking

University of Arkansas, Fayetteville

The YOU of A 257
The Department of Rehabilitation, Human Resources, and Communication Disorders offers the B.S.E. in Human Resource Development and the B.S.E. in Communication Disorders. The M.S. with an emphasis in speech-language pathology, M.S. and Ed.D. in higher education, M.S. and Ed.D. in workforce development, M.S. and Ph.D. in counselor education, and Ph.D. in rehabilitation are also offered.

**Rehabilitation, Human Resources, and Communication Disorders (RHRC)**

Fran Hagstrom  
Department Head  
100 Graduate Education Building  
479-575-4910  
E-mail: fhagstr@uark.edu

The Department of Rehabilitation, Human Resources, and Communication Disorders offers the B.S.E. in Human Resource Development and the B.S.E. in Communication Disorders. The M.S. with an emphasis in speech-language pathology, M.S. and Ed.D. in higher education, M.S. and Ed.D. in workforce development, M.S. and Ph.D. in counselor education, and Ph.D. in rehabilitation are also offered.

**Communication Disorders (CDIS)**

Larry Aslin  
Undergraduate Adviser  
606 N. Razorback Road  
Room 265, Epley Center for Health Professions  
479-575-4918  
laslin@uark.edu

Speech and Hearing Clinic  
Epley Center for Health Professions  
606 N. Razorback Road  
479-575-4509

**FACULTY**
- University Professor Emeritus Shadden  
- Associate Professors Toner, Hagstrom  
- Assistant Professor Baker  
- Clinical Assistant Professors Agan, Hunter  
- Research Associate Aslin  
- Instructor McGehee

An undergraduate major in communication disorders leads to the B.S.E. degree and prepares students for graduate studies (master's level) in speech-language pathology and/or the professional doctorate in audiology. The minimum requirements for all students in the college are listed under general studies on page 240.

**Admission to the B.S.E. Major Degree Program in Communication Disorders**

All students declaring an undergraduate major in communication disorders are accepted as tentative candidates to the undergraduate program and assigned the precommunication disorders code (PCDIS). However, formal admission to the program is limited. Students must apply for admission to the undergraduate B.S.E. degree program in communication disorders prior to taking junior- and senior-level classes in the major. Requirements for admission include the following:
- Completion of the admission application form.  
- Junior status at the time that 3000-level courses will be taken.  
- An overall minimum GPA of 3.0 over the first four semesters (50-60 hours) of college course work.  
- Satisfactory completion of an admission interview with designated members of the faculty.  
- Students who do not meet admission criteria for the B.S.E. degree program in communication disorders in any given year may reapply in subsequent years.

**Requirements for the program in Communication Disorders**

<table>
<thead>
<tr>
<th>University Core (State Minimum Core)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of which Communications Disorders requires the following specific courses:</td>
<td>35</td>
</tr>
<tr>
<td>BIOL 1543/1541L Principles of Biology with lab</td>
<td></td>
</tr>
<tr>
<td>PSYC 2003 General Psychology</td>
<td></td>
</tr>
<tr>
<td>ANTH 1023 Introduction to Cultural Anthropology</td>
<td></td>
</tr>
<tr>
<td>And choose one of the following:</td>
<td></td>
</tr>
<tr>
<td>PHYS 1023/1021L Physics and Human Affairs with lab</td>
<td></td>
</tr>
<tr>
<td>PHYS 2013/2011L College Physics I with lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 1073/1071L Fundamentals of Chemistry with lab</td>
<td></td>
</tr>
</tbody>
</table>

**Additional General Studies course requirements for Communication Disorders**

| ENGL 2003 Advanced Composition or ENGL 2013 Essay Writing or ENGL 3053 Technical and Report Writing or HNED 400VH(3), if honors student | 8 |
| COMM 1313 Public Speaking | |
| CHLP 2662 Terminology for the Health Professions | |

| 258 | The YOU of A | University of Arkansas, Fayetteville |
### Communication Disorders Major Requirements

- CDIS 2253 Introduction to Communicative Disorders
- CDIS 3103 Introduction to Audiology
- CDIS 3124 Normal Phonology and Articulatory Process
- CDIS 3203 Articulation Disorders
- CDIS 3213 Anatomy and Physiology of the Speech and Hearing Mechanisms
- CDIS 3224 Language Development in Children
- CDIS 3233 Introduction to Clinical Practice
- CDIS 4133 Intro. to Aural Rehab
- CDIS 4213 Intro. to Speech and Hearing Science
- CDIS 4183 Clinical Assessment of Speech and Language Disorders
- CDIS 4223 Language Disorders in Children
- CDIS 4253 Neurological Bases of Communication
- CDIS 4273 Communication Behavior and Aging

### Electives

- 40 Semester hours

### Total for Communication Disorders

- 124 Semester hours

---

### Communication Disorders B.S.E. Eight-Semester Degree Program

Students wishing to follow the eight-semester degree plan in Communication Disorders should see page 40 in the Academic Regulations chapter for university requirements of the program. An eight-semester plan for the Honors Option is available at the College of Education and Health Profession's Web site.

ALL CDIS students are accepted as tentative candidates. Students must apply for formal admission to the undergraduate B.S.E. degree program in CDIS prior to taking junior- and senior-level classes in the major. Refer to page 237 for admission criteria.

#### Fall Semester Year 2

- 3 ENGL 1013 Composition I
- 3 MATH 1203 College Algebra (or higher)
- 4 BIOL 1543/1541L Principles of Biology w/lab
- 3 POL 1303 U.S. History/Government
- 1 Elective

- **16 Semester Hours**

#### Spring Semester Year 2

- 3 ANTH 1023 Introduction to Cultural Anthropology
- 3 CDIS 2253 Intro to Communicative Disorders
- 3 PSYC 2003 General Psychology
- 4 PHYS 1021/1021L Physics and Human Affairs or CHEM 1073/1071L Fundamentals of Chemistry or PHYS 2031/2031L College Physics I
- 3 Elective

- **16 Semester Hours**

#### Fall Semester Year 3

- 4 CDIS 3124 Normal Phonology & Articulation
- 3 CDIS 3213 Anatomy of Speech and Hearing Mechanism
- 4 CDIS 3224 Language Development in Children
- 5 Electives

- **16 Semester Hours**

#### Spring Semester Year 3

- 3 CDIS 3203 Articulation Disorders
- 3 CDIS 3233 Introduction to Clinical Practice
- 3 CDIS 4223 Language Disorders in Children
- 3 ENGL 2003 Advanced Composition or ENGL 2013 Essay Writing or ENGL 3053 Technical and Report Writing or HNED 400VH (if honors program student)

- **124 Total hours**

---

### HUMAN RESOURCE DEVELOPMENT (HRDV)

Claretha Hughes
Program Coordinator
255 Graduate Education Building
479-575-2047
chbanks@uark.edu

Phil Gerke
Adviser
116A Graduate Education Building
479-575-4690
pgerke@uark.edu

**FACULTY**
- Professor Biggs
- Associate Professors Hughes, Thompson
- Clinical Assistant Professors Beck, Schmidtke

The HRDV major is specifically designed for career adults needing to complete a bachelor's degree that opens doors to opportunity and personal growth. HRDV curriculum uncovers the people skills and development strategies effective leaders use to facilitate performance improvements in individuals, teams, and organizations. The plan of study accelerates degree-completion by awarding technical credit for professional certifications and knowledge gained by experience. Online courses are offered on a traditional 15-week semester schedule in cooperation with the UA Global Campus. Undergraduates also obtain a solid academic base to pursue a graduate degree. This major does not lead to a traditional licensure for teachers in Arkansas.

Career adults who have satisfied a total of 43 or more hours of University Core and HRDV General Education requirements, who are members of the work force (even if temporarily unemployed); and who have three years of full-time work experience or equivalent are eligible to enter an HRDV program. If not previously completed, PSYC 2003 General Psychology (or its transfer equivalent) must be taken along with HRDV Concept courses in the first fall semester. All HRDV courses are offered online and are open for HRDV majors only.

### Human Resource Development (HRDV) Major

<table>
<thead>
<tr>
<th>University Core Requirements</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours must be PSYC 2003 General Psychology (pre- or corequisite for HRDV 4113 and HRDV 3213)</td>
<td>35</td>
</tr>
</tbody>
</table>

### HRDV General Education Requirements

| COMM 1313 Public Speaking, or similar course (pre- or corequisites for HRDV 3133 and HRDV 4133) | 20 |
Health/Wellness/Safety: CHLP 1103 Personal Health and Safety, TEED 1603 Industrial Safety, or PEAC 1621 Fitness Concepts, and similar course(s) (pre or corequisites for HRDV 4213)
11 hours of electives or as needed to total 20 hours of credits in HRDV General Education requirements

**HRDV Technical Requirements**
33
Required: HRDV 3403 Employment Law in HRD plus any combination of the following
Appropriate occupation-related, adviser-approved credits from UA coursework, transfers from accredited institutions of higher learning (within limits), or College Level Examination Program (CLEP) exams
Credit by advanced standing examination for job knowledge as measured by selected National Occupational Competency Testing Institute (NOCTI) assessments, transcribed as HRDV 200V Work Experience credit.
HDV 3503 Workforce Behavior
Additional HRDV 4603-4693 Applied HRDV coursework, up to 18 additional hours, beyond the HRDV Applied Requirement described below.
HRDV 450V Experiential Learning. Credit for certain professional certifications or occupational training based on either the Council for the Advancement of Experiential Learning (CAEL) format or American Council on Education (ACE) guidelines. Tuition is charged for these credit hours. Prerequisite: HRDV 3503 Workforce Behavior

**HRDV Concept Courses:**
24
HRDV 3113, HRDV 3123, HRDV 3133, HRDV 3213, HRDV 4113, HRDV 4133, HRDV 4213, HRDV 4233

**HRDV Applied Requirements:**
12
Students must complete two General and two Specific Applied courses of their choice. General: HRDV 4603, HRDV 4613, HRDV 4663, or HRDV 4673. Specific: HRDV 4623, HRDV 4633, HRDV 4643, HRDV 4653, HRDV 4683, or HRDV 4693. Students in HRDV Cohort 8 (Catalog Year 2003) and earlier may use credit from HRDV 3403 Employment Law and HRDV 3503 Workforce Behavior toward HRDV Applied requirements if desired.

**Total Hours:**
124

**Human Resource Development Concentration**

The nature of the Human Resource Development major excludes it from ACT 1014 eight-semester degree-completion program requirements. Additional information regarding this major is available on the College Web site.

Presented below is a typical plan for completing this degree in five semesters; individual student plans may vary significantly. Courses in bold must be taken that semester. Credit from Human Resource Development academic adviser–approved National Occupational Competency Testing Institute (NOCTI) assessments accelerate completion of technical requirements. If fewer credits than needed are earned by exam, completing additional appropriate coursework will require heavier course loads and/or additional semesters to graduate.

**Earned Prior to Fall Semester Year 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>University Core and HRDV General Education credits</td>
<td>43</td>
</tr>
<tr>
<td>10</td>
<td>Appropriate HRDV Technical credits</td>
<td>10</td>
</tr>
<tr>
<td>53</td>
<td>Semester Hours</td>
<td>53</td>
</tr>
</tbody>
</table>

**Fall Semester Year 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HRDV 3213 Intro to HRD</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV 4113 Theories/Principles of Adult Education</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>HRDV General Education courses as required</td>
<td>6</td>
</tr>
</tbody>
</table>

Begin taking all planned NOCTI tests, if any, approved by HRDV adviser

**12 Semester Hours**

**Spring Semester Year 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HRDV 3133 Communication in HRD</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV 3113 Skills and Strategies in HRD</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>HRDV General Education courses as required</td>
<td>6</td>
</tr>
</tbody>
</table>

If planned, complete all HRDV adviser-approved NOCT tests by March

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Credit by NOCTI examination(s) for job knowledge posted to transcript</td>
<td>14</td>
</tr>
</tbody>
</table>

**26 Semester Hours**

**Summer Semester Year 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adviser-approved HRDV Technical Electives</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV 3503 Workforce Behavior***</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV Applied General choice 1 of 2** or HRDV 3403 Employment Law*</td>
<td>3</td>
</tr>
</tbody>
</table>

**9 Semester Hours**

**Fall Semester Year 2**

(This example shows a distant transfer student in the “A” and “C” groups; the “B” rotation swaps the HRDV courses in bold in Fall Semester Year 2 with those in Spring Semester Year 2. Bold courses are for cohort group “A” or “C”; cohort group “B” take the bold HRDV courses in Fall Semester Year 2 instead.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HRDV 3133 Needs Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV 4113 Group Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV 3403 Employment Law* or HRDV Applied General choice 2 of 2**</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV Applied Specific course 1 of 2**</td>
<td>3</td>
</tr>
</tbody>
</table>

**12 Semester Hours**

**Spring Semester Year 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HRDV 4233 Leadership in HRD</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV 4213 Professional Development</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV Applied General choice 2 of 2** or HRDV 3403 Employment Law*</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>HRDV Applied Specific course 2 of 2**</td>
<td>3</td>
</tr>
</tbody>
</table>

**12 Semester Hours**

**Total Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>260</strong></td>
<td>* HRDV 3403 Employment Law, a Technical requirement for graduation, can be taken with Department approval in any fall or spring semester if all University Core and HRDV General Education requirements are complete or in progress.</td>
<td></td>
</tr>
<tr>
<td><strong>124</strong></td>
<td>** After all General Education and HRDV Technical requirements are complete or in progress, and after completing the prerequisite HRDV Concept courses, students must complete two General and two Specific Applied courses of their choice. General: HRDV 4603, HRDV 4613, HRDV 4663, or HRDV 4673. Specific: HRDV 4623, HRDV 4633, HRDV 4643, HRDV 4653, HRDV 4683, or HRDV 4693. Students in HRDV Cohort 8 (Catalog Year 2003) and earlier may use credit from HRDV 3403 Employment Law and HRDV 3503 Workforce Behavior toward HRDV Applied requirements if desired.</td>
<td></td>
</tr>
<tr>
<td>***</td>
<td>*** HRDV 3503 Workforce Behavior, available in spring and summer only, can be taken as an option for HRDV Technical credit with Department approval. HRDV 3503 is a prerequisite for HRDV 450V Experiential Learning. Any HRDV 450V credit would be applied in subsequent semesters in consultation with an HRD academic adviser.</td>
<td></td>
</tr>
</tbody>
</table>

See Page 366 for Human Resource Development (HRDV) courses.
Ever since people first began to use tools and manipulate their surroundings, engineering has been a vital aspect of human life, and these days, engineering is as important as it ever was. Society turns to engineers to solve a range of social, economic and environmental problems, and an engineering degree can prepare students to work as managers and leaders, in the public or private spheres. Engineering education combines math and science with creativity, innovation and a passion to change the world.

The College of Engineering adds personal, social and economic value to the region, the state, the nation, and the world through engineering education and cutting-edge research in emerging technologies.

Recognizing that the University of Arkansas, Fayetteville, is a land-grant institution with consequent responsibilities in teaching, research, and service, and realizing that these are mutually dependent and necessary responsibilities, the College of Engineering adopts and seeks to fulfill the following statements of purpose.

**Undergraduate Education** — Offer a high-quality and fully accredited course of instruction involving classroom, laboratory, and extracurricular activities that will result in professionals qualified to begin careers in the field of engineering and prepared to assume responsible places of leadership in society.

**Graduate Education and Research** — Offer state-of-the-art coursework and research experiences that result in all graduates being capable of independent analysis and design, and all Ph.D. graduates capable of extending the state-of-the-art in their areas of expertise.

**Continuing Education** — Provide local, regional, national, and international seminars, symposia, short courses, and credit courses to engineers and others in the technical community to help them further their formal education and keep abreast of new developments in technology.

**Technology Development and Job Creation** — Assist actively and vigorously in the growth and development of the state of Arkansas and the nation by performing research and developing innovative new technology, by updating the existing technology within industrial circles, by providing educational support services, and by attracting and creating new industry.

The College of Engineering focuses on research, teaching and outreach in the following areas:

- Biological, chemical and food processing
- Biomedical engineering
- Database
- Electric power systems and advanced power electronics
- Electronics manufacturing
- Environmental and ecosystems analysis
- Mixed signal electric systems
- Nanotechnologies
- Transportation, logistics and infrastructure
- Homeland security

More information about the College of Engineering can be found at http://www.engr.uark.edu/.

**COLLEGE OF ENGINEERING STRATEGIC PLAN**

"Engineering the Future – Today"

For more than 100 years, the College of Engineering has successfully fulfilled its primary mission: to provide an excellent engineering education to undergraduate and graduate students at the University of Arkansas.

The College of Engineering faculty, staff, alumni and students decided to accept the challenge to become one of the best. Specifically, the college's collective goal is:

**To become and be recognized as one of the top tier graduate and undergraduate engineering programs in the U.S.**

The College's strategic plan encompasses five main goals. By successfully accomplishing these objectives, the College of Engineering will contribute to the University of Arkansas becoming a nationally competitive, student-centered research institution serving Arkansas and the world, effectively fulfilling its purpose.

**Six Strategic Goals**

1. Provide a student-centered educational experience that attracts diverse, high-quality students, helps them to realize their potential, inspires them to pursue excellence at all degree levels and grooms them to become leaders in their profession.
2. Create a supportive research environment that enhances and recognizes scholarship while stimulating entrepreneurship and economic development within Arkansas, the nation and world.
3. Recruit, mentor and retain high-quality and diverse faculty members who value and promote world-class scholarship.
4. Attract, develop and retain well-qualified, diverse and skilled staff members who are equipped to support the growth and potential of the College of Engineering.
5. Implement service and outreach to enhance the impact of the College of Engineering both within and outside the university through service and outreach.
6. Become a catalyst for economic development to achieve the long-term economic goals of Arkansas through entrepreneurship, research and collaboration with industry and government.

DEGREES OFFERED

The College of Engineering offers programs leading to the following eight undergraduate degrees:

- Bachelor of Science in Biological Engineering (B.S.B.E.)
- Bachelor of Science in Biomedical Engineering (B.S.Bm.E.)
- Bachelor of Science in Chemical Engineering (B.S.Ch.E.)
- Bachelor of Science in Civil Engineering (B.S.C.E.)
- Bachelor of Science in Computer Engineering (B.S.Cmp.E.)
- Bachelor of Science in Computer Science (B.S.)
- Bachelor of Arts in Computer Science (B.A.)
- Bachelor of Science in Electrical Engineering (B.S.E.E.)
- Bachelor of Science in Indus trial Engineering (B.S.I.E.)
- Bachelor of Science in Mechanical Engineering (B.S.M.E.)

COLLEGE ADMISSION REQUIREMENTS

Undergraduate Students

Freshmen admitted to the University of Arkansas, Fayetteville, are eligible to enroll in the College of Engineering. The freshman curriculum stresses a basic foundation in mathematics, physics, and chemistry, which will be required in later years. The sophomore, junior, and senior years are spent in a strong concentration on the student’s chosen field, with emphasis on industrial applications of classroom and laboratory work. By the selection of electives, a student can concentrate in depth in a particular subject, have the flexibility to study several subjects, and minor in an area of interest. Provisions are made for electives in the humanities and social sciences as a means of providing a well-rounded education.

International Students

Before being admitted all computer engineering applicants must submit a Test of Spoken English (TSE) score of at least 5.0, or a 7.0 on the spoken section of the IELTS, and an ACT score of 25 (or SAT score of 1140(R)) or above, to be eligible for admission.

Transfer Students

In addition to the University policies controlling the granting of credit for course work taken at other institutions, the College of Engineering specifies that advanced (3000- and 4000-level at the University of Arkansas) engineering courses may not normally be transferred from institutions that do not have engineering programs accredited by the Engineering Accreditation Commission or the Computing Accreditation Commission of ABET.

HONORS PROGRAM

The College of Engineering has established an honors program to challenge superior students with a more in-depth academic program and research experience and to provide a structure for working more closely with faculty members and other students in a team environment. An honors program is highly recommended for individuals planning academic or research related careers that require considerable critical and original independent thinking. Admission requirements for the college’s Honors Program are as follows: entering freshmen must have at least a 3.5 high school GPA and at least a 28 composite score on the ACT; entering transfer students must have at least a 3.5 GPA on their transfer work. Students not initially qualifying for the Engineering Honors Program are eligible if they earn a 3,500 cumulative GPA at the University of Arkansas.

Students must formally apply for admission to the Engineering Honors Program. Once accepted into the program, Honors students take a minimum of 12 hours of Honors courses (a minimum of 6 of these 12 hours must be in engineering), participate in undergraduate research and write an undergraduate thesis, and must fulfill any additional departmental requirements. To receive Latin honors distinction at graduation, a student must hold a cumulative GPA of 3,500 or better (for all course work, computed at graduation).

Deadlines related to the Honors Program are as follows:
1. A Thesis/Project Proposal is to be completed prior to a student earning 90 semester hours.
2. Honors College Graduation Certification is to be completed prior to one week before the last day of classes of the student’s last semester.

OTHER PROGRAMS

Off-Campus Programs

The College of Engineering at the University of Arkansas (UofA) is offering the Bachelor of Science degrees in Electrical Engineering and Mechanical Engineering at the University of Arkansas at Fort Smith (UAFS). Upper-division courses are taught in person or through distance-learning technology by UAFS faculty, and lower-division courses are taught by UAFS faculty. The degree is awarded by University of Arkansas (UofA), but all classes are offered at the UAFS campus.

Cooperative Education

George Winter
Career Development Center, College of Engineering, Bell 3158
(479) 575-6201, Fax: (479) 575-7744, gwinter@uark.edu

Cooperative education (co-op) is an academic program that allows students to gain practical work experience prior to graduation. Over the years thousands of engineering students have participated in the co-op program at the University of Arkansas, gaining experience related to their major locally, within the state, across the nation, and internationally. Students work either full- or part-time in paid, degree-related jobs, and the skills they acquire allow them to step into their first full-time positions ready to contribute in ways that other students cannot. The material below will give more information about the co-op program.

Forms of Cooperative Education: Alternating and Parallel

In an alternating plan, students alternate between semesters of on-campus study and semesters off-campus at their co-op work site. In a parallel co-op, students work part-time for a local company (15 to 25 hours each week) and attend school at least half-time. In either plan the student is considered a full-time student.

By participating in Cooperative Education, students have the chance to:
- Gain hands-on experience in a real world setting
- Confirm the choice of their major
- Make valuable industry contacts
- Enhance their communication skills
- Make money while also taking classes
- Lay the foundations for a future full-time job

Requirements and Conditions

Undergraduate students must have completed 30 hours toward an engineering degree and must have a minimum 2.25 cumulative GPA. Students participating in a full-time co-op must have 12 hours of course work remaining upon return to campus.
Graduate students must have completed 6 hours toward an engineering degree and must have a minimum 3.0 cumulative GPA. Students participating in a full-time co-op must have 3 hours of course work remaining (not thesis, dissertation, or research). They must also have approval of the departmental graduate adviser prior to interviewing for co-op positions.

Transfer students must have completed one semester of full-time study in the College of Engineering and must meet all other co-op requirements.

Students in F-1 non-immigration status must have completed nine months of study in the United States and must meet all other Co-op requirements. Full-time co-op assignments consist of the following scenarios:

- One semester away from campus (Spring, Summer, or Fall).
- One summer and one semester away from campus (Spring & Summer OR Summer & Fall).
- Alternating Semesters between Spring, Summer, and Fall.

Students who are away from campus for 2 semesters in one year, are eligible for only one semester away the following year with no more than three co-op semesters in a 24-month period. (Exceptions to this must be approved in advance by their departmental co-op representative.) Students who are going to be away from campus for 24 months must receive prior approval from their departmental co-op representative.

Study Abroad Programs

The College of Engineering actively encourages engineering students to obtain an international experience while pursuing an engineering degree. Students have several opportunities to join engineering faculty-led programs in India, Belize and Spain as well as opportunities within the Southeastern Cooperative Academic Consortium (SECAC). For more information on study abroad opportunities, contact the Assistant Dean for International Programs, 479-575-7236.

Dual-Degree Transfer Programs

The College of Engineering recognizes that a graduate engineer, to be of full service to community, must be educated in the social sciences and humanities as well as in technical subjects. The practice of industry to elevate engineers to managerial and administrative positions elevates the desirability of a broad educational background. Likewise, most universities within Arkansas do not offer a degree in engineering. Accordingly, the College of Engineering of the University of Arkansas has entered into a cooperative program with several Arkansas “partner” universities to provide for dual-degree programs that lead to a Bachelor of Science degree from the partner university and an engineering degree from the University of Arkansas. Typically, a student spends two to three years at the partner university and then completes an engineering curriculum in two to three years at the University of Arkansas. The student is awarded the Bachelor of Art/Bachelor of Science degree by the partner university and the Bachelor of Science in an engineering discipline by the University of Arkansas. More information is available at http://www.eng.ua.edu/transfer.php

FACILITIES AND RESOURCES

Instructional, Computer, and Laboratory Facilities

Undergraduate instruction in engineering takes place in Bell Engineering Center, Engineering Hall, J.B. Hunt Center for Academic Excellence, and the Mechanical Engineering building. These facilities contain state-of-the-art classrooms and instructional equipment. Undergraduate laboratories are located both on the main campus as well as at the Engineering Research Center. Laboratories offer students hands-on experience relating to the subject matter addressed in the classroom.

The College of Engineering utilizes a wide variety of computing equipment to assist in engineering education. Students have easy access to computers through general computer laboratories or computer facilities located in specialized laboratories within the college. The computers are networked so that all the computing power of the university, including the mainframe computers, can be accessed from the PCs or workstations provided for engineering students. Owning a personal computer is not required; however, it is beneficial.

Library

The books and references used by engineering students and faculty are housed principally in the University of Arkansas Mullins Library. This collection is the most useful and comprehensive engineering library in the state. Many publications pertinent to the engineering profession are being added continuously. Mullins Library is the depository for water resources papers, geological survey materials, and NASA publications, as well as other governmental and industrial series.

Engineering Research Center

The 178,000-square-foot Engineering Research Center is located approximately two miles south of the main campus. The center provides the facilities and support services for a wide variety of research activities. It houses the Engineering Experiment Station through which the research of individual departments in the college is administered. Centers and laboratories located at the Engineering Research Center include GENESIS, the High Density Electronics Center, the Center for Training Transportation Professionals, and the Chemical Hazards Research Center.

Distance Learning

A Master of Science in Engineering (M.S.E.) degree is available for students who wish to take a broad range of engineering courses. See the Graduate School Catalog for details.

Professional development and continuing education credits can be earned through the College of Engineering’s Center for Distance Learning. These courses provide ongoing training on technical and engineering topics for professional engineers, land surveyors, and others in the technical and engineering professions.

The Master of Science in Operations Management (MSOM) degree program at the University of Arkansas offers students the philosophy, concepts, and techniques needed to manage available resources to achieve maximum efficiency and effectiveness in meeting operational goals. It provides the tools needed for successful management in industrial and/or military settings. Geared toward the working student, classes meet in the evenings in five 8-week terms per year. The program is offered at military installations at Little Rock Air Force Base (Jacksonville, Ark.), Naval Support Activity Mid-South (Millington, Tenn.), Hurlburt Field, Fla., and at in-state sites at Fayetteville, Camden, and Blytheville. Students in remote locations may also earn the MSOM degree by taking video courses. This is a non-engineering degree that is open to students from all undergraduate backgrounds. See the Graduate School catalog for details.

COLLEGE SCHOLARSHIPS

The College of Engineering awards numerous scholarships, and most are based primarily on academic performance. However, scholarships may also be awarded on the basis of financial need and diversity. Scholarships are available from both the college and its individual departments. College scholarships are available to any engineering student, and departmental scholarships are meant for students enrolled in a particular discipline of engineering. College and departmental scholarships are not available for entering freshmen. Students must be admitted to the University of Arkansas and enrolled in the College of Engineering to qualify and receive either a college or departmental scholarship. The college has a one-step application process that allows a student to be considered for all college-level and departmental scholarships.

For more information concerning scholarship and diversity opportunities, contact the Engineering Student Affairs Office at 575-3051 or e-mail engrdean@uark.edu.
STUDENT ORGANIZATIONS

The following are honor societies and professional societies to which engineering students at the University of Arkansas may aspire:

• Alpha Chi Sigma (a professional chemistry fraternity)
• Alpha Epsilon (Biological/Agricultural Engineering)
• Alpha Pi Mu (Industrial Engineering)
• Chi Epsilon (Civil Engineering)
• Eta Kappa Nu (Electrical Engineering)
• Omega Chi Epsilon (Chemical Engineering)
• Order of the Engineer (professional engineering society)
• Phi Eta Sigma (freshmen)
• Phi Kappa Phi (juniors and seniors)
• Phi Sigma Rho (professional engineering sorority)
• Pi Mu Epsilon (Mathematics)
• Pi Tau Sigma (Mechanical Engineering)
• Tau Beta Pi (Engineering)
• Theta Tau (A professional engineering fraternity, it maintains a chapter house on the campus and is active in university and college affairs.)

Several national engineering societies are listed below and maintain student branches in the College of Engineering, each under the auspices of a professor in a related department.

• American Chemical Society
• American Concrete Institute
• American Ecological Engineering Society
• American Indian Science and Engineering Society
• American Institute of Aeronautics and Astronautics
• American Institute of Chemical Engineers
• American Nuclear Society
• Amateur Radio Club of the University of Arkansas
• American Society of Agricultural and Biological Engineers
• American Society of Civil Engineers
• American Society of Electrical Engineers
• American Society of Heating, Refrigeration, and Air-Conditioning Engineers
• American Society of Mechanical Engineers
• Association for Computing Machinery
• Biomedical Engineering Society
• Engineers Without Borders
• Institute of Electrical and Electronics Engineers
• Institute of Electrical and Electronics Engineers, Components, Packaging, and Manufacturing Technology Society
• Institute of Electrical and Electronics Engineers, Power Electronics Society
• Institute of Industrial Engineers
• Institute of Transportation Engineers
• International Microelectronics and Packaging Society
• Materials Research Society
• National Association of Professional Engineers
• National Society of Black Engineers
• Society of Automotive Engineers
• Society of Hispanic Professional Engineers
• Society of Manufacturing Engineers
• Society of Women Engineers
• Transportation and Logistics Association

COLLEGE ACADEMIC REGULATIONS

Students are expected to keep themselves informed concerning current regulations, policies, and program requirements in their fields of study and must meet all requirements of the degree programs in which they are enrolled. Courses that are modified or added to a curriculum and that are incorporated into the curriculum at a level beyond that at which a student is enrolled may become graduation requirements for that student. Courses that are incorporated into the curriculum at a level lower than the one at which the student is enrolled are not required for that student.

Eligibility

Only students enrolled in the College of Engineering or enrolled in programs in which curricula require engineering courses will be allowed to take engineering courses. Exceptions to this requirement must be approved by the dean of engineering. This does not apply to graduate students.

Code of Ethics

Students in the College of Engineering are obligated to comply with pertinent provisions of the Code of Ethics applicable to professional practice following graduation. The Code requires "honesty, impartiality, fairness, and equity," and "adherence to the highest principles of ethical conduct." Most particularly, it states that engineers shall:

1. Be objective and truthful in professional reports, statements, or testimony;
2. Not falsify or permit misrepresentation of their academic or professional qualifications;
3. Give credit for engineering work to those whom credit is due;
4. Not compete unfairly with other engineers by attempting to obtain employment or advancement by improper or questionable methods;
5. Avoid any act tending to promote their own interest at the expense of the dignity and integrity of the profession.

DEGREE REQUIREMENTS

The basic requirement for a Bachelor of Science degree in engineering is 124-132 semester hours of academic work, depending on the career field chosen. Students coming from high school with adequate preparation will be able to satisfy this requirement in eight semesters; however, some students require preparatory courses, and others choose to enroll in slightly lighter loads and graduate in nine or ten semesters. Students enrolled in ROTC require an additional 19 semester hours to meet all graduation requirements and graduate in ten semesters (five years).

Engineering is a rapidly changing profession, and the departmental curricula are updated continuously to keep pace with these changes. Students entering under this catalog will be required to comply with such curriculum changes to earn their degree. However, the total number of semester hours required for the degree may not be increased, and all work completed in accordance with this catalog prior to the curriculum change will be applied toward the student's degree requirements. Former students of the college must meet the curriculum requirements in effect at the time of their readmission.

Graduation Requirements

In addition to the specific departmental requirements for degree plans, students should refer to the Academic Regulations chapter of this catalog for general university requirements, beginning on page 41. A portion of that information is listed here for convenience.

1. Grade-Point Average – A candidate for a degree from the College of Engineering must have earned a grade-point average of no less than 2.00 on all courses in the student’s major area of study, all engineering courses, and all work completed at the university and presented for the degree. Grades on work taken at other colleges and presented for transfer credit must also meet this standard.

2. Courses That Do Not Count Toward a Degree – The following courses do not count toward degree credit: ANTH 0003, PHSC 0003, ENGL 0003, MATH 0003, CIED 0003, MATH 1203, MATH 1213, and MATH 1285.

3. "D" Rule – No student will be allowed to graduate if the student has “D” grades in more than 15 percent of all credit earned in this institution and presented to meet the requirements for a degree.

4. Transfer of Courses

a) Students should consult with an academic advisor in the College of Engineering to determine how their transfer credit will apply to fulfilling requirements for a degree in engineering.
b) Advanced (3000- and 4000-level at the University of Arkansas) engineering courses may not normally be transferred from institutions that do not have programs accredited by the Engineering Accreditation Commission or Computing Accreditation Commission of the ABET.

c) A maximum of six hours of “D” grades can be transferred for degree credit. These courses must be part of the General Education Core or an elective course in the degree program (see Transfer of Credit section general education requirements of this catalog for more information).

5. **68 Hour Rule** – Students who transfer into the University may present for degree credit no more than 68 hours of lower division course work (1000 and 2000 level).

6. **University Core (State Minimum Core)** – The University of Arkansas has adopted a University Core of 35 semester-credit-hours of general education courses that are required of all baccalaureate degree candidates. This is in compliance with Arkansas Act 98 of 1989 and the subsequent action of the Arkansas State Board of Higher Education. Beginning in the fall semester of 1991, all state institutions of higher education in Arkansas have a 35-hour minimum core requirement with specified hours in each of six academic areas. The University and the College of Engineering have identified those courses that meet the minimum requirement, and they are listed in the chart below.

### Specific University Core Requirements for Engineering Students

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>6</td>
</tr>
<tr>
<td>ENGL 1013 Composition I</td>
<td></td>
</tr>
<tr>
<td>ENGL 1023 Technical Composition II</td>
<td></td>
</tr>
<tr>
<td>(ENGL 1023 Composition II may be taken in lieu of Technical Composition II)</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2554 Calculus I</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 2054 University Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2074 University Physics II or CHEM 1123, 1121L University Chemistry II or BIOL 1543, 1541L Principles of Biology</td>
<td></td>
</tr>
<tr>
<td>U.S. History or Government</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2030 History of American People to 1877</td>
<td></td>
</tr>
<tr>
<td>HIST 2013 History of American People 1877 to Present</td>
<td></td>
</tr>
<tr>
<td>PLSC 2003 American National Government</td>
<td></td>
</tr>
<tr>
<td>Fine Arts, Humanities and Social Sciences</td>
<td></td>
</tr>
<tr>
<td>Fine Arts and Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>9</td>
</tr>
</tbody>
</table>

### Minors in Other Colleges and Schools

Students in the College of Engineering may pursue an academic minor in other colleges. For example, a minor in business is popular among engineering students. For requirements regarding minors, check the catalog listing for the department offering the minor. Students must notify the College of Engineering dean’s office of their intent to pursue a minor.

### Requirements to Graduate with Honors

Students who have demonstrated exceptional academic performance in baccalaureate degree programs will be recognized at graduation by the honors designation of *cum laude*, *magna cum laude*, or *summa cum laude*. To earn this designation, the student must meet the following criteria:

1. Must have completed at least one-half of his or her degree work at the University of Arkansas;
2. Must have a minimum of 12 hours of honors courses (at least 6 of these hours in engineering), an undergraduate research experience and thesis, and any additional departmental requirements;
3. Research and thesis material shall be evaluated by each department;
4. For *cum laude*, the student must achieve a GPA of 3.50 or higher and have good or better performance on the undergraduate research and thesis;
5. For *magna cum laude*, the student must achieve a GPA of 3.75 or higher and have good or better performance on the undergraduate research and thesis;
6. For *summa cum laude*, the student must achieve a GPA of 3.90 or higher and have outstanding performance on the undergraduate research and thesis.

The criteria may be evaluated and changed periodically by the College of Engineering.

### Requirements to Graduate with Distinction

Students who have completed the Engineering Honors Program but have demonstrated excellent academic performance in baccalaureate degree programs will be recognized at graduation by the designation of "with distinction," "with high distinction," or "with highest distinction." To earn these designations, the student must meet the following criteria on his or her University of Arkansas course work:

1. Must have completed at least one-half of his or her degree work at the University of Arkansas;
2. For "with distinction," the student must achieve a GPA of 3.60 or higher;
3. For "with high distinction," the student must achieve a GPA of 3.75 or higher;
4. For "with highest distinction," the student must achieve a GPA of 3.90 or higher.

The criteria may be evaluated and changed periodically by the College of Engineering.

### GRADUATE STUDIES

The College of Engineering, in cooperation with the UA Graduate School, offers programs leading to the following graduate degrees:

- Master of Science in Biological Engineering (M.S.B.E.)
- Master of Science in Biomedical Engineering (M.S.B.M.E.)
- Master of Science in Chemical Engineering (M.S.Ch.E.)
- Master of Science in Civil Engineering (M.S.C.E.)
- Master of Science in Computer Engineering (M.S.Cmp.E.)
- Master of Science in Computer Science (M.S.)
- Master of Science in Electrical Engineering (M.S.E.E.)
- Master of Science in Engineering (M.S.E.)
- Master of Science in Environmental Engineering (M.S.En.E.)
- Master of Science in Industrial Engineering (M.S.I.E.)
- Master of Science in Mechanical Engineering (M.S.M.E.)
- Master of Science in Operations Management (M.S.O.M.)
- Doctor of Philosophy in Computer Science (Ph.D.)
- Doctor of Philosophy in Engineering (Ph.D.)

In addition, the College of Engineering supports the following interdisciplinary graduate programs:

- Master of Science in Cellular and Molecular Biology (M.S.)
- Master of Science in Microelectronics-Photonics (M.S.)
- Master of Science in Space and Planetary Sciences (M.S.)
- Doctor of Philosophy in Cellular and Molecular Biology (Ph.D.)
- Doctor of Philosophy in Microelectronics-Photonics (Ph.D.)
- Doctor of Philosophy in Space and Planetary Sciences (Ph.D.)

Further information concerning these programs may be found in the Graduate School Catalog or in the office of the dean of the Graduate School.

### ACCREDITATIONS

As the only comprehensive engineering program in Arkansas, the College of Engineering...
Engineering offers undergraduate, graduate, and doctoral degrees through seven academic departments. UA engineering programs have been continuously accredited by ABET since 1936.

The College of Engineering offers the following programs accredited by the Engineering Accreditation Commission of ABET. Visit http://www.abet.org.

- Bachelor of Science in Biological Engineering (B.S.B.E.)
- Bachelor of Science in Chemical Engineering (B.S.Ch.E.)
- Bachelor of Science in Civil Engineering (B.S.C.E.)
- Bachelor of Science in Computer Engineering (B.S.Cmp.E.)
- Bachelor of Science in Electrical Engineering (B.S.E.E.)
- Bachelor of Science in Industrial Engineering (B.S.I.E.)
- Bachelor of Science in Mechanical Engineering (B.S.M.E.)
- Master of Science in Biomedical Engineering (M.S.Bm.E.)
- Master of Science in Environmental Engineering (M.S.En.E.)

The College Engineering offers the following program accredited by the Computing Accreditation Commission of ABET. Visit http://www.abet.org.

- Bachelor of Science in Computer Science (B.S.)

**DEPARTMENTAL MAJORS**

### BIOLOGICAL AND AGRICULTURAL ENGINEERING (BAEG)

Lalit Verma  
Head of the Department  
203 Engineering Hall  
479-575-2351

**FACULTY**

- Professors Carrier, Haggard, Kim, Li, Loewer, Matlock, VanDevender, Verma  
- Associate Professors Costello, Osborn, Saraswat, Ye  
- Assistant Professors Jin, Liang, Sadaka, Zaharoff  
- Adjunct Professors Ang, Beitle, Clausen, Deaton, Ingels, Raper  
- Adjunct Associate Professors Bajwa, Shafirstein, Yang  
- Adjunct Assistant Professor Hestekin (C.), Howell, Thorbole, Wimberly

The department’s mission is: Healthy People, Healthy Planet. Biological Engineers improve people’s lives today and help assure a sustainable quality of life for tomorrow. They create solutions to problems by coupling living systems (human, plant, animal, environmental, food, and microbial) with the tools of engineering and biotechnology. Biological engineers improve human health; ensure a safe, nutritious food supply; and secure a healthy and safe environment. The department focuses on engineering design that promotes sustainable production, processing and management of food, water and energy. A bachelor of science degree in biological engineering is a job-ready degree with opportunities in many industries, government agencies, and consulting firms. It is also excellent preparation for medical, veterinary, dental or other health science professional school as well as M.S. or Ph.D. studies in engineering or other areas.

Biological Engineering is an ABET accredited program leading to the B.S. degree. The M.S. and Ph.D. degrees are also offered. The curriculum is under the joint supervision of the dean of the College of Engineering and the dean of the Dale Bumpers College of Agricultural, Food and Life Sciences. The B.S. in Biological Engineering degree is conferred by the College of Engineering and is granted after the successful completion of 128 hours of approved coursework.

The educational objectives of the Biological Engineering program are to produce graduates who 1) effectively apply engineering to biological systems and phenomena (plant, animal, human, microbes, and the environment) with demonstrated proficiency in basic professional and personal skills, and 2) are well prepared for diverse careers in biological engineering, life-long learning, and professional and ethical contributions to society through sustained accomplishments in the numerous areas of application for biological engineering.

Diverse applications of biological engineering can be pursued through elective coursework such as:

- Integrating ecological principles into the design of sustainable systems to treat, remediate, and prevent pollution to the environment. Applications include stream restoration, watershed management, water and wastewater treatment design, ecological services management, urban greenway design and enclosed ecosystem design.
- Food processing, food safety and security, biosensing and bioinstrumentation, biotechnology at the micro and nanoscale, developing new products from biomaterials, and biotransformation to synthesize industrial and pharmaceutical products.
- Sustainable design and management of finite resources with a broad perspective — local to global and cradle to grave — life cycle analysis of resource utilization, environmental impacts with a view toward long-term prosperity.

The B.S. in Biological Engineering – degree can lead to careers in consulting, ecological engineering and design, environmental engineering, sustainable agriculture and food production, low impact development, water quality and watershed management, human health, biotechnology, natural resource engineering, nanotechnology, and biofuels development to name but a few.

Each student is required to complete 6 semester hours of technical/engineering electives that are relevant to their career goals. At least 3 hours must be engineering courses within BENG or other engineering programs. The other three hours can be selected from math, science and other technical areas. Suggested electives are listed below. Students may petition adviser for other electives that are not explicitly on this list. Course must provide engineering or technical content that is value-added (i.e., not duplicating or remedial courses) and meets career goals of the student.

**Suggested Engineering Electives:**

- BENG 4113, Risk Analysis for Biological Systems
- BENG 4123, Biosensors
- CHEG 3153, Non-Equilibrium Mass Transfer
- CHEG 3333, Chemical Engineering Reactor Design
- CHEG 4423, Automatic Process Control
- CVEG 2053/2051L, Surveying Systems w/Lab
- CVEG 3243, Environmental Engineering
- CVEG 4243, Environmental Engineering Design
- INEG 2313, Applied Probability and Statistics for Engineers I
- INEG 2413, Engineering Economic Analysis
- MEEG 2013, Dynamics
- MEEG 3013, Mechanics of Materials
- MEEG 4413, Heat Transfer

**Suggested Technical Electives:**

- BIOL 2443/2441L, Human Anatomy w/Lab
- BIOL 2213/2211L, Human Physiology w/Lab
- CSES 2203, Soil Science
- ENSC 4034, Analysis of Environmental Contaminates
- FDSC 3103, Food Processing
- FDSC 4123, Food Microbiology
- FDSC 4304, Food Chemistry
- GEOL 1113/1101L, General Geology w/Lab

(Or any engineering electives listed above)
Biological Engineering B.S.B.E.

Eight-Semester Degree Program

The Bachelor of Science in Biological Engineering program is eligible for students who want to participate in an Eight Semester Degree Program. The plan below lists a semester-by-semester sequence of courses to finish the degree in eight semesters. University core courses for engineering are listed at the bottom of this page. Students may submit a maximum of four (4) hours of “D” in BENG Courses for their degree.

Some courses are not offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course pre-requirements. Students should note the BIOL 1543/1541L is a pre or co-requisite to BENG 2632 in Fall 2 semester. Students should earn advanced college credit for BIOL pre-requisites. Students should note the BIOL 1543/1541L is a pre or co-requisite to University core courses for engineering are listed at the bottom of this page. Students who want to participate in an Eight Semester Degree Program. The plan below lists a semester-by-semester sequence of courses to finish the degree in eight semesters. University core courses for engineering are listed at the bottom of this page. Students may submit a maximum of four (4) hours of “D” in BENG Courses for their degree.

Fall Semester Year 1
1  GNEG 1111 Introduction to Engineering I
3  ENGL 1013 Composition I
3  CHEM 1113 University Chemistry for Engineers I (or CHEM 1103)
4  MATH 2554 Calculus I
4  PHYS 2054 University Physics I
15  Semester hours

Spring Semester Year 1
1  GNEG 1121 Introduction to Engineering II
3  ENGL 1023 Technical Composition II
4  Freshman Engineering Science Elective*
4  MATH 2564 Calculus II
3  U.S. History Requirement
15  Semester hours

Fall Semester Year 2
2  BENG 2612 Biological Engr Design Studio II
4  Sophomore Science Elective**
4  MATH 2574 Calculus III
4  CHEM 3603/3601L Organic Chemistry I with lab
2  MEEG 2003 Statics
16  Semester hours

Spring Semester Year 2
3  BENG 2643 Biological Engineering Methods
4  MATH 3404 Differential Equations
4  CHEM 3613/CHEM 3611L Organic Chemistry II with lab
3  CVEG 3213 Hydraulics, (or MEEG 3503 or CHEG 2133)
3  MEEG 2403 Thermodynamics (or CHEG 2133)
17  Semester hours

Fall Semester Year 3
3  BENG 3723 Unit Operations in Biological Engr
3  BENG 3733 Kinetics and Transport Phenomena in Biological Systems
3  CHEM 3813 Introduction to Biochemistry
4  BIOL 2013/2011L General Microbiology with lab
3  CVEG 3223 Hydrology
16  Semester hours

Spring Semester Year 3
3  BENG 3653 Global Bio-Energy Engineering
3  BENG 3743, Food and Bio-Product Systems Engineering
3  BENG 3933 Sustainable Watershed Engineering
4  BIOL 3863/3861L General Ecology with lab
3  ELEG 3903 Electric Circuits and Machines
16  Semester hours

Fall Semester Year 4
3  BENG 4813 Senior Biological Engineering Design I
3  BENG 4663 Sustainable Biosystems Design
3  BENG 4103 Measurements and Controls for Biological Systems
6  Humanities/Social Science Electives
15  Semester hours

Spring Semester Year 4
2  BENG 4822 Senior Biological Engr Design II
3  Engineering Elective
9  Humanities/Social Science Electives
3  Technical Elective
17  Semester hours
128  Total hours

* The Freshman Engineering Science Elective must be chosen from either CHEM 1123/1121L (or CHEM 1133/1131L) or PHYS 2074.

** The sophomore Science Elective must be PHYS 2074 (if CHEM 1123/1121L or CHEM 1133/1131L was chosen as the Freshman Engineering Elective) or CHEM 1123/1121L (or CHEM 1133/1131L) if PHYS 2074 was chosen as the Freshman Engineering Science Elective. That is, both courses are required for the degree.

See Page 320 for Biological Engineering (BENG) courses.

BIOMEDICAL ENGINEERING (BMEG)

Terry Martin
Interim Head of the Department
Bell Engineering 4183
479-575-7455

FACULTY

• Distinguished Professors Rardin, Saxena, Vasundhara Varadan, Vijay Varadan
• Professors Ang, Beitle, Carrier, Deaton, El-Shenawee, Kim, Verma, Wickramsinghe
• Associate Professors Roper, Tung, Ye
• Assistant Professors Hestekin (C.), Jin, Servoss, Weijinya, Wolchok, Zaharoff

Biomedical engineering encompasses the design, creation, and operation, of processes / technology related to the broad field of human healthcare. The profession traditionally has focused on applications related to the development of instrumentation and diagnostic equipment, discovery of novel treatment options, production of new therapeutics, and the elucidation of underlying biophysical phenomena. Newer applications of bioengineering take advantage of the ever deepening understanding of human physiology and molecular genetics, as related to prevention, detection, and treatment of medical conditions. The program objectives of the Biomedical Engineering undergraduate program are to produce graduates who are capable of:

• succeeding in the practice of engineering or other professional activities, and
• succeeding in post baccalaureate studies.

Completion of the degree requirements provides for the following educational outcomes:

• an ability to apply knowledge of mathematics, science, and engineering
• an ability to design and conduct experiments, as well as to analyze and interpret data
• an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
• an ability to function on multidisciplinary teams
• an ability to identify, formulate, and solve engineering problems
• an understanding of professional and ethical responsibility
• an ability to communicate effectively
• the broad education necessary to understand the impact of engineering solutions in global, economic, environmental, and societal contexts
• a recognition of the need for, and an ability to engage in life-long learning
• a knowledge of contemporary issues
• an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

These educational outcomes are experienced within the context of biology and physiology appropriate to solving problems at the interface of engineering and biology.
### Biomedical Engineering B.S.Bm.E.

#### Eight-Semester Degree Program

The following section contains the list of courses required for the Bachelor of Science in Biomedical Engineering degree and a suggested sequence for students who enter the College through the Freshman Engineering Program. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites. Students wishing to follow the eight-semester degree plan should see page 42 in the Academic Regulations chapter for university requirements of the program.

#### Fall Semester Year 1
- 3 ENGL 1013 Composition I
- 4 MATH 2554 Calculus I
- 3 CHEM 1103 University Chemistry I
- 4 PHYS 2054 University Physics I
- 0 PHYS 2050L University Physics I Lab
- 1 GNEG 1111 Introduction to Engineering I

15 Semester hours

#### Spring Semester Year 1
- 3 ENGL 1023 Technical Composition II
- 4 Freshman Science Elective *
- 0 Freshman Science Elective Lab *
- 4 MATH 2554 Calculus II
- 3 HIST 2003 or HIST 2013 or PLSC 2003
- 1 GNEG 1121 Introduction to Engineering II

15 Semester hours

#### Fall Semester Year 2
- 3 BMEE 2613 Introduction to Biomedical Engineering
- 4 MATH 2574 Calculus III
- 4 Sophomore Science Elective **
- 0 Sophomore Science Elective Lab **
- 4 BIOL 1543/1541L Principles of Biology

15 Semester hours

#### Spring Semester Year 2
- 3 BMEE 2813 Biomechanics
- 4 BMEE 2903/2901L Biomedical Instrumentation
- 4 MATH 3404 Differential Equations
- 3 BIOL 2533 Cell Biology
- 3 Fine Arts Elective (from Univ/State Core List)

17 Semester hours

#### Fall Semester Year 3
- 3 BMEE 2623 Biomaterials
- 4 CHEM 3663/3661L Organic Chemistry I
- 4 BIOL 2213/2211L Human Physiology
- 3 CHEG 2313 Thermodynamics
- 4 ELEG 3124 Systems and Signal Analysis

18 Semester hours

#### Spring Semester Year 3
- 3 BMEE 3653 Biomedical Modeling and Numerical Methods
- 4 BMEE 3823/3811L Biomolecular Engineering
- 4 CHEM 3613/3611L Organic Chemistry II
- 3 CHEG 2133 or MEEG 3503 Fluid Mechanics
- 3 Social Science Elective (from Univ/State Core List)

17 Semester hours

#### Fall Semester Year 4
- 3 BMEE 4813 Biomedical Engineering Design I
- 3 BMEE 4623 Biomedical Transport Phenomenon
- 3 BMEE Elective
- 3 Science Elective
- 3 Social Science Elective (from Univ/State Core List)

15 Semester hours

#### Spring Semester Year 4
- 3 BMEE 4923 Biomedical Engineering Design II
- 3 BMEE Elective
- 3 BMEE or Science Elective
- 3 Social Science Elective (from Univ/State Core List)
- 3 Humanities Elective (from Univ/State Core List)

15 Semester hours

127 Total hours

* The Freshman Engineering Science Elective must be chosen from either CHEM 1123/1121L or PHYS 2074.
** The sophomore Science Elective must be PHYS 2074 (if CHEM 1123/1121L was chosen as the Freshman Engineering Elective) or CHEM 1123/1121L (if PHYS 2074 was chosen as the Freshman Engineering Science Elective. That is, both courses are required for the degree.

---

### Technical Options in Biomedical Engineering

Elective courses must be selected from a faculty-approved list of courses found in the department’s Undergraduate Advising Handbook, which is available on the department’s website at http://www.bmeg.uark.edu. Elective courses are chosen with the aid of an academic adviser to better prepare for employment or further study in areas such as:

- Biotechnology
- Pharmaceutical manufacturing or pharmacology
- Biomedical device design
- Medicine
- Business
- Law

Each student in biomedical engineering is required to complete six semester hours of biomedical engineering technical electives (see Undergraduate Advising Handbook for a list of courses), and four semester hours of Organic Chemistry (3 hour with 1 hour laboratory). Students interested in pursuing an undergraduate biomedical degree as a lead to medical school should be aware that a total of 8 hours of organic chemistry (6 hour with 2 hour laboratory) may be required (please see your adviser for more specific details).

### Technical Elective Courses

Six hours of upper level technical electives will be chosen from upper division (3000 and above) courses in mathematics, engineering, and the sciences with the approval of their adviser. The department maintains a list of approved technical electives which may be found in the department’s Undergraduate Advising Handbook, which is available on the department’s website at http://www.bmeg.uark.edu.

### Honors Program Requirements

Students enrolled in the Honors College who are to receive the Bachelor of Science in Biomedical Engineering must complete a minimum of 12 hours of honors credit. At least 6 hours must be completed within the Biomedical Engineering program including at least 3 hours resulting in an Honors Thesis. The BMEE honors courses are acceptable as engineering electives and in some cases may be substituted for required courses.

See Page 325 for Biomedical Engineering (BMEE) courses.

---

### CHEMICAL ENGINEERING (CHEG), RALPH E. MARTIN DEPARTMENT OF

Thomas O. Spicer, III
Head of the Department
3202 Bell Engineering Center
479-575-4951

FACULTY

- Distinguished Professor Havens
- Distinguished Professors Emeriti Gaddy, Thatcher
- University Professor Emeritus Turner
- Professors Babcock, Beitle, Clausen, Penney, Spicer, Thoma, Ulrich, Wickramasinghe
- Professors Emeriti Couper, Cross
- Research Professor Silano
- Associate Professors Ackerson, Hestekin (J.), Qian, Roper
- Assistant Professors Hestekin (C.), Servoss
- Instructor Emeritus Myers
- Adjunct Associate Professor Tian
- Adjunct Assistant Professor Leftwich
Chemical engineering deals with the creation, design, operation, and optimization of processes that derive practical benefits from chemical or physical changes principally involving chemical and biochemical reactions. The profession is quite broad and has traditionally provided the technology for: supplying energy and fuel; synthesizing materials such as plastics, chemicals, fertilizers, and pharmaceuticals; and managing environmental and safety concerns of physical and chemical processes. Some new applications of the principles of chemical engineering at nanoscales are being made in sustainable energy production and detection of gene mutations, protein configurations, and virus serotypes as well as thermal destruction of cancer cells.

Chemical engineers have a variety of traditional job opportunities in industries such as petroleum production and processing, chemical manufacturing, food processing, pharmaceutical production, and process equipment manufacturing. Job opportunities may involve research, development, design, manufacturing, sales, or teaching as professional activities. The chemical engineer can also move easily into environmental engineering, nuclear engineering, oceanography, biomedical engineering, pharmacology, law, medicine, or other multidisciplinary fields.

In chemical engineering, students obtain a broad foundation in chemistry, mathematics, physics, communication skills, economics, and the humanities. Courses in material and energy balances, thermodynamics, reaction kinetics, fluid mechanics, heat and mass transfer, process control, computer methods, safety, and design provide students with the background and learning skills required of the practicing chemical engineer. The curriculum includes elective courses that enable a student to prepare for immediate employment or further study at the graduate level or the professional level, such as for medical school. The chemical engineering program also serves as an excellent preparation for dental, pharmacy, or law school.

The educational objective of the chemical engineering undergraduate program is to prepare students for careers and professional accomplishment after graduating, including:

- Successful practice as an engineer or in some other professional pursuit, including traditional or emerging fields of chemical engineering.
- Entrance and successful participation in a graduate or professional program (such as medical school) that continues their career development.

The program prepares graduates to achieve these educational objectives through development of their skills as outlined in our educational outcomes and taught in our curriculum. By the time of graduation, students have the opportunity to attain the following educational outcomes:

- An ability to apply knowledge of mathematics, science, and engineering;
- An ability to design and conduct experiments, as well as analyze and interpret data;
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
- An ability to function on multidisciplinary teams);
- An ability to identify, formulate, and solve engineering problems;
- An understanding of professional and ethical responsibility;
- An ability to communicate effectively;
- The broad education necessary to understand the impact of engineering solutions in global, economic, environmental, and societal contexts.
- A recognition of the need for, and an ability to engage in, life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

These outcomes are reinforced and demonstrated in a senior capstone safety, design, and laboratory course sequence.

### Chemical Engineering B.S.Ch.E.

#### Eight-Semester Degree Program

The following section contains the list of courses required for the Bachelor of Science in Chemical Engineering degree and a suggested sequence for students who do not enter the College through the Freshman Engineering Program. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites. Students wishing to follow the eight-semester degree plan should see page 42 in the Academic Regulations chapter for university requirements of the program. Entering freshmen will be required to participate in selected Freshman Engineering Student Services.

#### Fall Semester Year 1

- 4 MATH 2554 Calculus I
- 3 CHEM 1103 University Chemistry II
- 2 CHEG 1212L Chemical Engineering Lab I
- 3 ENGL 1013 Composition I
- 3 HIST 2003 Hist/American People to 1877 (HIST 2013 or PLSC 203 may be substituted.)

15 Semester hours

#### Spring Semester Year 1

- 4 MATH 2564 Calculus II
- 3 CHEM 1123 University Chemistry II
- 1 CHEG 1212L University Chemistry II Lab
- 3 ENGL 1023 Composition II
- 3 CHEG 1113 Introduction to Chemical Engineering I
- 3 Humanities/social science core elective

17 Semester hours

#### Fall Semester Year 2

- 4 MATH 2574 Calculus III
- 3 CHEM 3603 Organic Chemistry I
- 1 CHEM 3601L Organic Chemistry I Lab
- 4 PHYS 2054 University Physics I
- 3 CHEG 2123 Introduction to Chemical Engineering II
- 3 CHEG 2133 Fluid Mechanics

18 Semester hours

#### Spring Semester Year 2

- 4 MATH 3404 Differential Equations
- 3 CHEM 3613 Organic Chemistry II
- 1 CHEM 3611L Organic Chemistry II Lab
- 4 PHYS 2074 University Physics II
- 3 CHEG 2313 Thermodynamics of Single Component Systems
- 3 Humanities/social science core elective

18 Semester hours

#### Fall Semester Year 3

- 3 Advanced Science Elective
- 3 CHEM 3813 Biochemistry or CHEM 4813H Honors Biochemistry I
- 2 CHEG 3143 Heat Transport
- 2 CHEG 3232L Chemical Engr Lab II
- 3 CHEG 3253 Chem Engr Computer Methods
- 3 CHEG 3323 Thermodynamics of Multicomponent Systems

17 Semester hours

#### Spring Semester Year 3

- 3 Advanced Science or Chemical Engineering Elective
- 3 CHEG 3713 Materials Technology
- 3 CHEG 3333 Chem Engr Reactor Design
- 3 CHEG 3153 Non-Equil Mass Transfer
- 3 ECON 2143 Basic Economics (ECON 2013 Principles of Macro-economics may be substituted.)

16 Semester hours

#### Fall Semester Year 4

- 3 CHEG 4163 Equil Stage Mass Transfer
- 3 CHEG 4413 Chem Engr Design I
- 3 CHEG 4813 Chemical Process Safety
- 3 Technical elective
- 3 Humanities/social science core elective

15 Semester hours

#### Spring Semester Year 4

- 2 CHEG 4332L Chem Engr Lab III
- 3 CHEG 4443 Chem Engr Design II
- 3 ELEG 3903 Electric Circuits and Machines
- 3 CHEG 4423 Auto Process Control
- 3 Technical elective

15 Semester hours
The YOU of A College of Engineering

The faculty mentor.

prepared by the student and approved by the Department Honors Committee and recommendations.

Honors College students in one of the following ways:

- Completion of the American Institute of Chemical Engineers Design Competition Problem individually following contest rules as part of CHEG 4443 Design II;
- Completion of a design contest problem as part of a team, such as the WERC competition in CHEG 4443 Design II; or
- Completion of CHEG 488V Special Problems at the direction of a faculty mentor.

Regardless of the thesis project, an Honors Thesis and oral presentation will be prepared by the student and approved by the Department Honors Committee and the faculty mentor.

See Page 327 for Chemical Engineering (CHEG) courses.

## Technical Elective Options in Chemical Engineering

Each student in chemical engineering is required to complete six semester hours of technical electives, three semester hours of Advanced Science electives, and three semester hours of Advanced Science or Chemical Engineering electives. Students may select technical elective courses from upper division (3000 and above) courses in mathematics, engineering, and the sciences with the approval of their adviser. Advanced Science and Chemical Engineering elective courses must be selected from a faculty-approved list of courses found in the department’s Undergraduate Advising Manual, which is available on the department’s Web site at http://www.chege.uark.edu. An undergraduate education in chemical engineering provides a firm foundation for many areas of expertise. As discussed in the department’s Undergraduate Advising Manual, students can select elective courses to better prepare for employment or further study in areas such as:

- Biotechnology
- Biomedical engineering
- Environmental engineering
- Food process engineering
- Materials engineering
- Microelectronics
- Nuclear engineering
- Pre-medicine
- Simulation and optimization

Additional opportunities are available to enhance the educational experience of students in these areas. Students should consult their academic adviser for recommendations.

## Honors Program Requirements

Chemical engineering students enrolled in the Honors College are encouraged to complete the requirements to graduate with honors. In addition to grade point require-ments, Honors College students must complete a total of at least 12 hours of honors course credits including a minimum of 6 hours of honors course credits in chemical engineering. The student must also participate in a design or research project culminating in an Honors Thesis. Thesis credit in the department will be satisfied by Honors College students in one of the following ways:

- Completion of the American Institute of Chemical Engineers Design Competition Problem individually following contest rules as part of CHEG 4443 Design II;
- Completion of a design contest problem as part of a team, such as the WERC competition in CHEG 4443 Design II; or
- Completion of CHEG 488V Special Problems at the direction of a faculty mentor.

Regardless of the thesis project, an Honors Thesis and oral presentation will be prepared by the student and approved by the Department Honors Committee and the faculty mentor.

Civil engineering is the oldest of all the engineering fields, yet it is as contemporary as the need to provide solutions to today’s environmental problems and to develop advanced transportation systems. The civil engineer plans, designs, builds, and operates projects for the advancement and wellbeing of society while coordinating and conserving human and natural resources. Civil engineering projects range from small to monumental and include public water systems, buildings, bridges, rail and highway networks, wastewater treatment plants, solid and hazardous waste disposal facilities, airports, and soil conservation and flood diversion controls.

The civil engineering profession offers a vast array of opportunities. Civil engineers may work in private employment or with public agencies. They may work indoors in activities such as planning and design, or outdoors in areas such as construction supervision. Employment is possible anywhere in the world.

The objectives of the civil engineering program are to produce graduates who are:

1. employable in any of the following fields: foundation, earthwork, and embankment design and analysis; water, wastewater, and waste handling and treatment; highway facility design and operation; and structural design and analysis.
2. academically prepared to pursue licensure as a Professional Engineer.
3. prepared to pursue an advanced education.

To fulfill these objectives, all students must take courses in geotechnical, environmental, transportation, and structural engineering. Courses are designed to present “real world” applications without sacrificing conceptual and theoretical basics. Students complete design problems in each of these areas; and, as part of the senior year, they participate in two major design projects.

### Civil Engineering B.S.C.E.

#### Eight-Semester Degree Program

The Civil Engineering B.S.C.E. program is eligible for freshman students who want to participate in an Eight-Semester Degree Program.

The following section contains the list of courses required for the Bachelor of Science in Civil Engineering degree and a suggested sequence. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites.

The university core courses for engineering students are listed at the bottom of this section.

### Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENG 1013</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>4 MATH 2554</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>3 CHEM 1113</td>
<td>University Chemistry for Engineers I</td>
<td>3</td>
</tr>
<tr>
<td>4 PHYS 2054</td>
<td>University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>0 PHYS 2050L</td>
<td>University Physics I Lab</td>
<td>0</td>
</tr>
<tr>
<td>1 GNEG 1111</td>
<td>Introduction to Engineering I</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Semester hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENG 1023</td>
<td>Technical Composition II</td>
<td>3</td>
</tr>
<tr>
<td>4 Freshman Science Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>0 Freshman Science Elective Lab</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>4 MATH 2564</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>3 HIST 2003, HIST 2013, or PLSC 2003</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1 GNEG 1121</td>
<td>Introduction to Engineering II</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Semester hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
**Elective Courses**

Students must select four 3-hour engineering elective courses in conference with their adviser. The selection must include three civil engineering courses. The fourth course must be selected from one of the following: MEEG 2013 Dynamics, MEEG 2403 Thermodynamics, or ELEG 3903 Electric Circuits and Machines. Normally, the civil engineering courses are selected from among the 4000-level elective CVEG courses. Exceptional students may be allowed to choose from the 5000 (graduate-level) course series. Humanities and social science electives are selected from courses approved by the college. Lists of approved electives are on file in the department office.

**Civil Engineering Design Electives**

Students must complete two of the following four CVEG design project electives: CVEG 4812 Environmental Design Project, CVEG 4822 Geotechnical Design Project, CVEG 4832 Structural Design Project, and CVEG 4842 Transportation Design Project. Each design project elective is associated with a specific, a specific design-oriented course. The associated course must be taken at the same time as the design project elective. The associated courses may be taken alone but the design electives cannot.

---

**Honors Program Requirements**

Students enrolled in the Honors College who are to receive the Bachelor of Science in Civil Engineering must complete a minimum of 12 hours of honors credit. At least 6 hours must be completed within the Civil Engineering program including at least 3 hours resulting in an Honors Thesis. The CVEG honors courses are acceptable as engineering electives and in some cases may be substituted for required courses. The following Civil Engineering courses are offered for honors credit: CVEG 491VH Honors Studies in Geotechnical Engineering, CVEG 492VH Honors Studies in Environmental Engineering, CVEG 493VH Honors Studies in Structural Engineering, CVEG 494VH Honors Studies in Transportation Engineering, and CVEG 4983H Undergraduate Honors Thesis.

See Page 340 for Civil Engineering (CVEG) courses.

---

**COMPUTER SCIENCE AND COMPUTER ENGINEERING (CSCE)**

Susan Gauch  
Head of the Department  
504 JB Hunt Center for Academic Excellence  
479-575-6197

**FACULTY**

- Professors Andrews, Deaton, Gauch (J.), Gauch (S.), Li, Panda, Thompson (C.)
- Associate Professors Beavers, Bobda, Di, Parkerson, Thompson (D.)
- Assistant Professors Banerjee, Huang

The faculty of the Computer Science and Computer Engineering Department is engaged in multidisciplinary academic research, course offerings, and student projects in areas such as: networking, data security, low power chip design, Web search, embedded systems, and graphics.

The educational objectives of the department are to produce graduates who are recruited in a competitive market and make valuable contributions to a wide variety of industries, particularly in computer and information technology; succeed in graduate or professional studies; pursue life-long learning and continued professional development; and undertake leadership roles in their profession, in their communities, and in the global society.

The computer engineering degree has required sequences of courses in both hardware and software aspects of computer applications and design. Since almost all of today’s complex systems encompass hardware and software elements, computer engineering graduates must acquire the skills required to design, build, and test complex digital systems. At the advanced level, students are exposed to hands-on experience with open-ended problems with opportunities for research and design.

A degree in computer science provides a wide variety of career choices. Computer science graduates can design, implement, or manage computer systems, as well as adapt computers to new applications. Computer science core courses include the fundamentals of programming concepts, data structures, operating systems, algorithms, formal languages, and database management systems.

The Bachelor of Science programs in Computer Engineering and Computer Science culminate in a capstone project completed in two consecutive semesters. In the first semester, students form teams and develop a project proposal. In the second semester, students develop, implement, and present the final project.

Humanities and social science electives are selected from the University Core Requirements listed in the Catalog of Studies. To satisfy the University Core, all CSCE students are required to take the following 18 hours of humanities/social science courses:

- 3 hours: PHIL 3103 Ethics and the Professions
- 3 hours of Fine Arts from category “a”
The Bachelor of Arts in Computer Science degree has the same educational objectives as the Bachelor of Science degree. However, the course requirements differ greatly to allow students to double major or pursue interests in Geosciences, Information Systems or Mathematics.

### Computer Engineering B.S.Cmp.E.

#### Eight-Semester Degree Program

The following sections contain the list of courses required for the Bachelor of Science in Computer Engineering (B.S.Cmp.E.) with a suggested sequence below. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites. Students wishing to follow the eight-semester degree plan should see Page 42 in the Academic Regulations chapter for university requirements of the program.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th>17 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 MATH 2554 Calculus I</td>
<td></td>
</tr>
<tr>
<td>3 CHEM 1113 University Chemistry I for Engineers</td>
<td></td>
</tr>
<tr>
<td>4 PHYS 2054 University Physics I</td>
<td></td>
</tr>
<tr>
<td>1 GNEG 1111 Introduction to Engineering I</td>
<td></td>
</tr>
<tr>
<td>3 ENGL 1013 English Composition</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 1</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 MATH 2564 Calculus II</td>
<td></td>
</tr>
<tr>
<td>4 Freshman Science elective*</td>
<td></td>
</tr>
<tr>
<td>3 History/Government elective</td>
<td></td>
</tr>
<tr>
<td>1 GNEG 1121 Introduction to Engineering II</td>
<td></td>
</tr>
<tr>
<td>3 ENGL 1023 Composition II</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 MATH 2574 Calculus III</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 2004 Programming Foundations I</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 2114 Digital Design</td>
<td></td>
</tr>
<tr>
<td>3 MATH 2603 Discrete Math</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 2</th>
<th>18 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 MATH 2584 Differential Equations</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 2214 Computer Organization</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 2014 Programming Foundations II</td>
<td></td>
</tr>
<tr>
<td>3 Social Science elective</td>
<td></td>
</tr>
<tr>
<td>3 Social Science elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 3</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 CSCE 3953 System Synthesis and Modeling</td>
<td></td>
</tr>
<tr>
<td>3 CSCE 3193 Programming Paradigms</td>
<td></td>
</tr>
<tr>
<td>3 PHIL 3103 Ethics &amp; the professions</td>
<td></td>
</tr>
<tr>
<td>4 Basic Science elective with lab**</td>
<td></td>
</tr>
<tr>
<td>3 COMM 1313 Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 3</th>
<th>16 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 CSCE 3613 Operating Systems</td>
<td></td>
</tr>
<tr>
<td>3 CSCE 3513 Software Engineering</td>
<td></td>
</tr>
<tr>
<td>3 ELEG 3933 Circuits and Electronics</td>
<td></td>
</tr>
<tr>
<td>3 Free Elective</td>
<td></td>
</tr>
<tr>
<td>3 STAT 3013 Introduction to Probability and Statistics or INEG 2313 Applied Probability and Statistics for Engineers I</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 4</th>
<th>17 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CSCE 4561 Capstone I</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 4114 Embedded Systems</td>
<td></td>
</tr>
<tr>
<td>3 CSCE Elective</td>
<td></td>
</tr>
<tr>
<td>3 CSCE Elective</td>
<td></td>
</tr>
<tr>
<td>3 Fine Arts elective</td>
<td></td>
</tr>
<tr>
<td>3 Free Elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 4</th>
<th>17 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 CSCE 4963 Capstone II</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Computer Science B.S.</th>
</tr>
</thead>
</table>

#### Eight-Semester Degree Program

The following sections contain the list of courses required for the Bachelor of Science in Computer Science (B.S.) degrees with a suggested sequences below. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites. Students wishing to follow the eight-semester degree plan should see Page 42 in the Academic Regulations chapter for university requirements of the program.

<table>
<thead>
<tr>
<th>Fall Semester Year 1</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 MATH 2554 Calculus I</td>
<td></td>
</tr>
<tr>
<td>4 PHYS 2054 University Physics I</td>
<td></td>
</tr>
<tr>
<td>3 CHEM 1103 University Chemistry I</td>
<td></td>
</tr>
<tr>
<td>1 GNEG 1111 Introduction to Engineering I</td>
<td></td>
</tr>
<tr>
<td>3 ENGL 1013 English Composition</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 1</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 MATH 2564 Calculus II</td>
<td></td>
</tr>
<tr>
<td>4 Freshman Science elective*</td>
<td></td>
</tr>
<tr>
<td>3 PHIL 3103 Ethics and the Profession</td>
<td></td>
</tr>
<tr>
<td>3 CSCE 3313 Algorithms</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 3193 Programming Paradigms</td>
<td></td>
</tr>
<tr>
<td>4 COMM 1313 Public Speaking</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 2</th>
<th>18 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 MATH 2103 Discrete Math</td>
<td></td>
</tr>
<tr>
<td>4 Basic Science elective with lab**</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 2004 Programming Foundations I</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 2114 Digital Design</td>
<td></td>
</tr>
<tr>
<td>3 Social Science elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 2</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 MATH 3103 Combinatorics</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 2014 Programming Foundations II</td>
<td></td>
</tr>
<tr>
<td>4 CSCE 2214 Computer Organization</td>
<td></td>
</tr>
<tr>
<td>3 Humanities elective</td>
<td></td>
</tr>
<tr>
<td>3 Social Science elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 3</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 CSCE 3191 Programming Paradigms</td>
<td></td>
</tr>
<tr>
<td>3 CSCE 3313 Algorithms</td>
<td></td>
</tr>
<tr>
<td>3 COMM 1313 Public Speaking</td>
<td></td>
</tr>
<tr>
<td>3 MATH 3083 Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>3 PHIL 3103 Ethics and the Profession</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 3</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 CSCE 3613 Operating Systems</td>
<td></td>
</tr>
<tr>
<td>3 CSCE 3513 Software Engineering</td>
<td></td>
</tr>
<tr>
<td>4 ELEG 3933 Circuits and Electronics in Fall of Year 3 must be PHYS 2074 University Physics I</td>
<td></td>
</tr>
<tr>
<td>3 Free Elective</td>
<td></td>
</tr>
<tr>
<td>3 STAT 3013 Introduction to Probability and Statistics (INEG 2313 can be substituted)</td>
<td></td>
</tr>
<tr>
<td>3 Social Science elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester Year 4</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CSCE 4561 Capstone I</td>
<td></td>
</tr>
<tr>
<td>3 CSCE 4561 Capstone I</td>
<td></td>
</tr>
<tr>
<td>3 CSCE 4523 Database Management</td>
<td></td>
</tr>
<tr>
<td>3 CSCE elective</td>
<td></td>
</tr>
<tr>
<td>3 CSCE elective</td>
<td></td>
</tr>
<tr>
<td>3 Humanities/social sciences elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester Year 4</th>
<th>15 Semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 CSCE 4963 Capstone II</td>
<td></td>
</tr>
</tbody>
</table>
### Eight-Semester Degree Program

**Computer Science B.A.**

The following sections contain the list of courses required for the Bachelor of Arts in Computer Science (B.A.) degrees with a suggested sequences below.

Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites. Students wishing to follow the eight-semester degree plan should see Page 42 in the Academic Regulations chapter for university requirements of the program.

#### Fall Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCE 1013 Explorations in Computing*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 1013 English Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 2554 Calculus I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 2003 or HIST 2013 or PLSC 2003</td>
<td>3</td>
<td>Social Science elective</td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 15-16

#### Spring Semester Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCE 2004 Programming Foundations I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 1023 Technical Composition II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective (from University core)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 16

#### Fall Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCE 2014 Programming Foundations II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 2603 Discrete Mathematics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Science elective (from University core)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 16-17

#### Spring Semester Year 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 2003 Advanced Composition</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>STAT 2303 Principles of Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Science elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 15

#### Fall Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCE 3193 Programming Paradigms</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMM 1313 Public Speaking</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Science elective (from University core)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 16

#### Spring Semester Year 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCE elective (1)</td>
<td>3</td>
<td>Study Area (1st course)</td>
</tr>
<tr>
<td>PHIL 2203 Logic</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective (3000-level or higher)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 15

#### Fall Semester Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCE elective (2)</td>
<td>3</td>
<td>Study Area (2nd course)</td>
</tr>
<tr>
<td>Science elective (from University core)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective (3000-level or higher)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Free elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 16

#### Spring Semester Year 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCE elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Study Area</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Semester Hours:** 15

* Students who complete the Enterprise Resource Planning sequence will receive a SAP certificate

---

### Degree Program Changes

Students must meet all requirements of their degree programs and are expected to keep informed concerning current regulations, policies, and program requirements in their fields of study. Changes made in the curriculum at a level beyond that at which a student is enrolled might become graduation requirements for that student. Changes made in the curriculum at a level lower than the one at which a student is enrolled are not required of that student. Students should consult their departmental adviser for additional information.

### Requirements for Departmental Honors in Computer Science and Computer Engineering

The Honors Program in Computer Science and Computer Engineering is designed for the superior student and is intended to help the student develop a more comprehensive view of Computer Science and Computer Engineering. The program provides a vehicle for the recognition of achievements beyond the usual course of study. Higher degree distinctions are recommended only in truly exceptional cases and are based upon the candidate's whole program of honors studies. A minimum of 12 hours of honors coursework is required.

The following requirements are necessary for graduation with honors in either the Computer Engineering or Computer Science Bachelor of Science program:

1. The candidate must satisfy the requirements set forth by the College of Engineering.
2. A student must obtain at least a 3.50 grade-point average in required Computer Engineering and/or Computer Science courses.
3. The student must complete 7 hours of Honors credit in the major, which includes 4 hours of Honors Thesis taken as two successive semesters of CSCE 4912H and 3 hours of CSCE coursework.

### Requirements for a Minor in Computer Science


---

See Page 338 for Computer Science and Computer Engineering (CSCE) courses.
Electrical engineering is a professional engineering discipline that in its broader sense covers the study and application of electricity, electronics and electromagnetism. Electrical engineers are in charge of designing and utilizing electrical and electronic components, integrated circuits and computer chips, and electronic assemblies to benefit mankind. Fields of electrical engineering include analog and mixed-signal circuit design/test, biomedical, communications, computer hardware and digital circuit design, control systems, electronic packaging, embedded systems design, microwave and radar engineering, nanophotonics, nanotechnology/microelectronics/optoelectronics, pattern recognition and artificial intelligence, power electronics, and renewable energy/power.

The electrical engineering graduate is at the forefront of technologies leading to accelerated use of electric power, applications of real time embedded control systems for smart highways, smart vehicles and smart gadgets, global communications, the dominating influence of the computer and electronics on modern society, the use of electronic equipment for medical diagnosis, the use of wireless chemical and biological nanosensors for hazard detection, the miniaturization of electronics, microwave and optical technology for national defense, and a host of other developments. Therefore, the use of electrical and electronic equipment has spread into such diverse areas as agricultural production, automobiles, computer hardware and networks, health care, information technology, manufacturing, marketing, recreation, renewable energy resources, outer space and underwater exploration, transportation, and many others. As a result, electrical engineering is the largest of all scientific disciplines and assures a continuing demand for electrical engineering graduates throughout private industry and government.

The University of Arkansas, the state land-grant university, is a nationally competitive, student-centered, research university serving Arkansas and the world. As such, the department’s mission is education, research, and service. Hence, the electrical engineering program is designed to offer a high-quality course of instruction and development for a successful and rewarding career; and
4. Accept responsibility for leadership roles in their profession, in their communities, and in the global society.

Therefore, the electrical engineering curriculum is designed to provide students with knowledge of scientific principles and methods of engineering analysis to form a solid foundation for a career in design, research and development, manufacturing and processing, measurement and characterization, or management. Students progressively build their design experience throughout the curriculum and demonstrate this ability in the senior electrical engineering design laboratories. The curriculum also introduces students to subjects in the humanities, social sciences, and ethics so they may better understand the interaction of technology and society.

The electrical engineering curriculum is divided into three phases. The first year concentrates on the development of a sound understanding of basic sciences and mathematics. The second and third years further develop scientific principles and cover the basic core of electrical engineering. The fourth year is composed primarily of senior-level elective courses. At this time, the students in consultation with their advisers may choose classes related to one or more of the major areas of electrical engineering detailed (e.g., analog and mixed-signal circuit design/test, biomedical, communications, computer hardware and digital circuit design, control systems, electronic packaging, embedded systems design, microwave and radar engineering, nanophotonics, nanotechnology/microelectronics/optoelectronics, pattern recognition and artificial intelligence, power electronics, and renewable energy/power).

This final year permits the student to tailor a program suited to her or his individual career objectives. The graduation requirement in electrical engineering is 126 semester hours as given below.

The department also actively participates in the Honors Program to challenge superior students with a more in-depth academic program and research experience. The Honors program enables students to work more closely with faculty members and other students in a team environment. Please see the requirements given below.

Graduate Program in Electrical Engineering

The graduate program offers a Master of Science degree in Electrical Engineering and a Doctor of Philosophy degree in Engineering. The graduate program provides additional instruction and hands-on experience beyond the undergraduate level, and produces graduates who are prepared to promptly address critical issues and assume advanced positions in the profession, including management, design, teaching, research and development.

The research mission of the department is conducted mainly through the graduate program. Internal and external funded research projects serve to:
1. Discover new knowledge, address technical problems, and develop new electrical/electronic technologies;
2. Provide the tools and resources which keep the faculty at the cutting edge of electrical engineering;
3. Provide financial support for graduate students and gifted undergraduate students; and
4. Improve the quality of life for citizens of Arkansas and the world.

The graduate program supports the undergraduate program by giving top undergraduate students access to research laboratories with state-of-the-art equipment and software. Topics covered in graduate courses often migrate into senior undergraduate technical elective courses and eventually into required undergraduate courses.

Departmental Service Mission

Faculty, students, administrators, and staff conduct the service mission of the department and serve as a major resource for the state, the region, the nation and the world. Faculty members are encouraged to provide services to both the community and the profession. Hence, they are active in local, state, national, and international professional and service organizations, as well as public and private schools involving grades K-12.
Electrical Engineering B.S.E.E.

Eight-Semester Degree Program

The following section contains the list of courses required for the Bachelor of Science in Electrical Engineering and a suggested eight-semester sequence. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites.

Fall Semester Year 1
1  GNEG 1111 Introduction to Engineering I 
3  ENGL 1013 Composition I 
4  MATH 2554 Calculus I 
3  CHEM 1113 Chemistry for Engineers I 
4  PHYS 2054 University Physics I 
15  Semester hours

Spring Semester Year 1
1  GNEG 1121 Introduction to Engineering II 
3  ENGL 1023 Composition II 
4  MATH 2564 Calculus II 
3  HIST 2003 or HIST 2013 or PLSC 2003 
4  Freshman Science Elective** 
15  Semester hours

Fall Semester Year 2
4  ELEG 2104 Electric Circuits I with lab 
4  ELEG 2904 Digital Design I with lab 
4  MATH 3404 Differential Equations 
4  Sophomore Science Elective** 
16  Semester hours

Spring Semester Year 2
4  CSCE 2004 Programming Foundations I 
4  ELEG 2114 Electric Circuits II with lab 
4  MATH 2574 Calculus III 
3  Humanities Elective (from University/State Core list) 
15  Semester hours

Fall Semester Year 3
4  ELEG 3124 Systems and Signals with lab 
4  ELEG 3214 Electronics I with lab 
4  ELEG 3924 Microprocessor Systems Design with lab 
4  ELEG 3704 Applied Electromagnetics with lab 
16  Semester hours

Spring Semester Year 3
4  ELEG 3224 Electronics II with lab 
4  ELEG 3303 Energy Systems with lab 
3  ELEG 3143 Probability and Stochastic Processes 
3  Social Science Elective (from University/State Core list) 
3  Math/Science/Technical Elective 
17  Semester hours

Fall Semester Year 4
1  ELEG 4061 Electrical Engineering Design I 
3  Electrical Engineering Technical Elective 
3  Electrical Engineering Technical Elective 
3  Engineering Science/Technical Elective 
3  Fine Arts Elective (from University/State Core list) 
16  Semester hours

Spring Semester Year 4
3  ELEG 4073 Electrical Engineering Design II 
3  Electrical Engineering Technical Elective 
3  Technical Elective 
3  Technical Elective 
3  Social Science Elective (from University/State Core list) 
15  Semester hours
125  Total hours

* Freshman Science Elective - CHEM 1133/1131 Chemistry for Engineers II or PHYS 2074 University Physics II

** Sophomore Science Elective
If CHEM 1133/1131 Chemistry for Engineers II was taken for Freshman Science Elective, then PHYS 2074 University Physics II
If PHYS 2074 University Physics II was taken for the Freshman Science Elective, then CHEM 1133/1131 Chemistry for Engineers II or BIOL 1543/1541L Principles of Biology or BIOL 2213/2211L Human Physiology

Students should become very familiar with the Academic Regulations chapter for university requirements that apply to the electrical engineering program as well as the College of Engineering requirements (in particular the “D rule” and the “Transfer of Credit” for courses taken at another institution). In addition to these graduation requirements, candidates for an electrical engineering degree must have earned a grade-point average of no less than 2.00 on all ELEG courses.

Degree Program Changes

A student must meet all requirements of the degree program and is expected to stay informed concerning current regulations, policies, and program requirements in a chosen field of study. Changes made in the electrical engineering curriculum at a level beyond that at which a student is enrolled may become graduation requirements for that student. Changes made in the curriculum at a level lower than the one at which a student is enrolled are not normally required for that student. Students should consult their adviser for additional information.

Electrical Engineering Honors Program

To graduate with Honors in electrical engineering, students must be a member of the Honors College, have a minimum cumulative GPA of 3.50, and complete a minimum of 12 hours of honors credit of which 6 hours must be Electrical Engineering courses that include the following: ELEG 4061H – Honors Electrical Engineering Design I, ELEG 4073H – Honors Electrical Engineering Design II, and ELEG 400VH – Senior Thesis.

Recommended Technical Studies

Students in electrical engineering are required to complete 21 semester hours of technical electives of which a minimum of 9 semester hours must be 4000- or 5000-level electrical engineering elective courses. A student may select the remaining 12 semester hours from 4000- or 5000-level electrical engineering elective courses or upper-division technical courses in mathematics, engineering, and the sciences with the approval of an adviser. One of these courses may be an approved Math/Science Elective and another may be an approved Engineering Science Elective. History and social science courses taught by Math and Science departments are not eligible for technical elective credit. Not more than 6 semester hours total of ELEG 488V and ELEG 400V may be credited toward technical electives. Students who have taken 3 full-time co-op experiences under GNEG 3811, and whose grades in these courses were A or B, may get credit for three hours of non-ELEG technical electives if the work performed is of comparable quality to a technical elective; consult with the Department Co-op Coordinator. Descriptions of all electrical engineering courses are in the Course Descriptions chapter of this Catalog of Studies. The schedule of technical electives offered in a given semester is determined the previous semester since the selection depends on a number of varying factors such as student interest in a particular topic, the importance of a particular technology for the student’s professional career, and teaching faculty availability.

Potential Minors

Although ELEG students can pursue any minor they desire, there are several minors that require a minimal number of extra courses, such as Computer Science, Mathematics, Microelectronics-Photonics, Physics, etc. Students are advised to review the specific rules pertaining to the minor of interest in the section of the UA Catalog of Studies corresponding to the department granting that minor.

See Page 346 for Electrical Engineering (ELEG) courses.
The mission of the industrial engineering department at the University of Arkansas is to be a nationally competitive, student-centered industrial engineering program serving Arkansas and the world through undergraduate and graduate studies and leading-edge research programs.

Industrial engineers are concerned with improving organized activity. The physical arrangement of people, equipment, and material significantly influences the effectiveness of any organization – whether the organization is industrial, governmental, or commercial.

Today’s industrial engineers develop applications of new processing automation and control technology; install data processing systems, performance measures and standards, job evaluation and wage and salary programs; research new products and product applications; devise ways to improve productivity through application of technology and human factors; select operating processes and methods to accomplish a given task using proper tools and equipment; design facilities, management systems, operations procedures, storage systems; improve allocation of resources, planning and control systems for distribution of goods and services, production, inventory, quality and plant maintenance; enhance plant environment and the quality of working life; evaluate reliability and quality performance; implement office systems, procedures, and policies; analyze complex business problems through operations research; conduct long-range organization studies, plant location surveys, system effectiveness studies; and study potential markets for goods and services, raw material sources, labor supply, energy resources, financing and taxes.

Industial engineers integrate engineering skills with mathematics and computer science tools, providing systematic ways to maximize productivity and quality while minimizing time and cost.

The goal of the Industrial Engineering Undergraduate Program at the University of Arkansas is to prepare men and women for professional careers and graduate studies in Industrial Engineering. We provide a foundation in mathematics, science, humanities and social sciences, engineering science, and engineering design to produce Industrial Engineers with the intellectual, technical, and professional competence to develop, implement, and manage industrial engineering solutions to complex problems in industry, government, and society.

The IE Program Objectives represent and describe the expected accomplishments of graduates resulting from participation within the program within the first few years after graduation. The department's objectives have been developed to address the needs of departmental constituencies and to be consistent with and support the mission and programmatic goals. The University of Arkansas undergraduate program in industrial engineering has the objective of producing graduates who can:

1. Demonstrate successful application of core industrial engineering knowledge and skills for industrial or public sector organizations.
2. Successfully pursue advanced professional degrees, graduate studies in industrial engineering, professional training, or engineering certification.
3. Demonstrate professional and intellectual growth as managers and leaders in industrial engineering, society, and their communities.

These specific objectives are reinforced by a senior capstone design course in which the student must apply the skills to a comprehensive design problem for an industry setting. This course integrates preceding courses through development of physical systems and organizational characteristics, financial aspects, product analysis, equipment selection, production layout, distribution systems, and overall economic analysis.

The total graduation requirement in industrial engineering is 129 hours. For further information please visit the department at http://www.ineg.uark.edu/.

### Industrial Engineering B.S.I.E.

#### Eight-Semester Degree Program

The following section contains the list of courses required for the Bachelor of Science in Industrial Engineering degree and a suggested sequence. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites. Students wishing to follow the eight-semester degree plan should see page 42 in the Academic Regulations chapter for university requirements of the program.

At least 12 hours of technical electives must be selected from INEG courses.

#### Fall Semester Year 1

1. MATH 2554 Calculus I
2. CHEM 1103 Chemistry for Engineers I
3. PHYS 2054 University Physics I
4. GNEG 1111 Introduction to Engineering I
5. ENGL 1013 Composition I

15 Semester hours

#### Spring Semester Year 1

1. MATH 2564 Calculus II
2. Freshman Science elective* or MATH 2574 Calculus II
3. HIST 2003 or HIST 2013 or PLSC 2003
4. GNEG 1112 Introduction to Engineering II
5. ENGL 1023 Technical Composition II

15 Semester hours

#### Fall Semester Year 2

1. INEG 2102 Intro to Industrial Engineering
2. INEG 2313 Applied Probability and Statistics for Engineers I
3. INEG 2413 Engineering Economic Analysis
4. MATH 2574 Calculus III
5. CSCE 2004 Programming Foundations I

16 Semester hours

#### Spring Semester Year 2

1. INEG 2403 Industrial Cost Analysis
2. INEG 2333 Applied Probability and Statistics for Engineers II
3. INEG 2513 Manufacturing Design
4. MATH 3404 Differential Equations
5. Science Requirement**

16 Semester hours

#### Fall Semester Year 3

1. INEG 3623 Simulation
2. INEG 3713 Methods and Standards
3. MEEG 2003 Statics
4. ELEG 3903 Electric Circuits and Machines
5. Fine Arts (from University/State Core list)
6. Technical Elective

18 Semester hours

#### Spring Semester Year 3

1. INEG 3613 Introduction to Operations Research
2. INEG 4723 Ergonomics
4. Engineering Science Elective 2: Select one from CHEG 2133 Fluid Mech. MEEG 2403 Thermo
5. ECON 2143 Basic Economics
6. Technical Elective

18 Semester hours

#### Fall Semester Year 4

1. INEG 4433 Systems Engineering & Management
2. INEG 4553 Production Planning and Control
3. Technical elective
4. Technical elective
5. Social Science (from University/State Core list)

15 Semester hours

---

**Footnotes:

*Freshman Science elective* can be a course from the following list: PHYS 2054, CHEM 1103, or ENGR 111.

**Science Requirement** must be chosen from the following list: ENGL 1013, ENGL 1023, or any course from the University/State Core list.
The mechanical engineering program is designed to offer a high-quality course of instruction involving classroom, laboratory, and extracurricular activities that results in graduates who are qualified and prepared to meet the demands of a professional career in the present and future work place and be able to assume a responsible place of leadership in a complex technological society.

The mission of the department is three-fold:
1. Teaching — To provide a high-quality educational experience for undergraduate and graduate students that enables them to become leaders in their chosen professions.
2. Research — To create, explore, and develop innovations in engineering and science through undergraduate and graduate research.
3. Service — To provide beneficial service to the local, state, national, and international industries and communities via educational, technical, entrepreneurial, and professional activities.

The courses offered in mechanical engineering provide the student with a broad understanding of fundamental scientific principles that serve as a background for many fields of specialization. The undergraduate curriculum is designed to stress basic engineering principles and to assist in developing creative thinking. Emphasis is placed on the science and art of designing machines and systems, of converting energy into useful forms, and developing a basic understanding of engineering mechanics. The undergraduate program leads to a Bachelor of Science degree in Mechanical Engineering; its educational objectives are to produce graduates who:

1. effectively analyze and design mechanical systems and energy systems;
2. contribute to the economic development of Arkansas and the world through the practice of mechanical engineering;
3. meet or exceed the needs and expectations of mechanical engineering employees in industry, government, and private practice;
4. engage in professional activities that promote the mechanical engineering profession and provide continuing self-development, and
5. succeed in graduate study and research, if pursued.

The Bachelor of Science in Mechanical Engineering curriculum includes, in addition to the required 15 hours of fine arts/humanities/social science elective courses, a total of 12 hours of technical and science electives. A student must select all electives with the approval of his or her adviser. The fine arts/humanities/social science electives must be selected from the University Core Curriculum listed on page 41 in the Academic Regulations chapter for university requirements for the program. It is expected that technical and science electives will be chosen to provide a coherent program within one or more areas of specialization or options available to mechanical engineers. Traditional areas of specialization are available in mechanical systems, materials, and energy systems. Other areas include pre-medical, management, and aerospace.

The first-year curriculum is essentially the same as prescribed for all engineering freshmen. The full curriculum follows, with the number of credit hours at the left, preceding course numbers and titles.

### MECHANICAL ENGINEERING (MEEG)

James Leylek
Head of the Department
204 Mechanical Engineering Building
479-575-4153
Fax: 479-575-6982
E-mail: jleylek@uark.edu

Larry A. Roe
Associate Department Head
204 Mechanical Engineering Building
479-575-3750
E-mail: lar@uark.edu

James A. Davis
Undergraduate Coordinator and Assistant Department Head
204 Mechanical Engineering Building
479-575-3603
E-mail: jad03@uark.edu

Web: http://www.meeg.uark.edu/

FACULTY
- Distinguished Professors Malshe, Saxena
- Professors Jong, Leylek, West
- Associate Professors Couvillion, Nutter, Roe, Spearot, Springer, Tung, Zou
- Assistant Professors Huang, Wejinya
- Instructors Davis, Roberts
- Adjunct Professor Cole
- Adjunct Associate Professors Myers, Paulus, Reynolds
- Adjunct Assistant Professors Batzer, Chaffin, Hamilton
- Emeritus Professor Schmidt

The courses offered in mechanical engineering provide the student with a broad understanding of fundamental scientific principles that serve as a background for many fields of specialization. The undergraduate curriculum is designed to stress basic engineering principles and to assist in developing creative thinking. Emphasis is placed on the science and art of designing machines and systems, of converting energy into useful forms, and developing a basic understanding of engineering mechanics. The undergraduate program leads to a Bachelor of Science degree in Mechanical Engineering; its educational objectives are to produce graduates who:

1. effectively analyze and design mechanical systems and energy systems;
2. contribute to the economic development of Arkansas and the world through the practice of mechanical engineering;
3. meet or exceed the needs and expectations of mechanical engineering employees in industry, government, and private practice;
4. engage in professional activities that promote the mechanical engineering profession and provide continuing self-development, and
5. succeed in graduate study and research, if pursued.

The Bachelor of Science in Mechanical Engineering curriculum includes, in addition to the required 15 hours of fine arts/humanities/social science elective courses, a total of 12 hours of technical and science electives. A student must select all electives with the approval of his or her adviser. The fine arts/humanities/social science electives must be selected from the University Core Curriculum listed on page 41 in the Academic Regulations chapter for university requirements for the program. It is expected that technical and science electives will be chosen to provide a coherent program within one or more areas of specialization or options available to mechanical engineers. Traditional areas of specialization are available in mechanical systems, materials, and energy systems. Other areas include pre-medical, management, and aerospace.

The first-year curriculum is essentially the same as prescribed for all engineering freshmen. The full curriculum follows, with the number of credit hours at the left, preceding course numbers and titles.

### Mechanical Engineering B.S.M.E.

#### Eight-Semester Degree Program

The following section contains the list of courses required for the Bachelor of Science in Mechanical Engineering degree and a suggested sequence. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites. Students interested in obtaining a sequencing schedule of courses may contact the Mechanical Engineering office.

Students wishing to follow the eight-semester degree plan should see page 42 in the Academic Regulations chapter for university requirements for the program. Either the science elective in the second semester of Year 1 or the science elective in the first semester of Year 2 must include PHYS 2074. Other science electives should be chosen from an approved list. See the mechanical engineering office.

#### Fall Semester Year 1

1. **ENGL 1013 Composition I**
2. **CHEM 1113 Chemistry for Engineers I**
3. **PHYS 2054 University Physics I**
4. **MATH 2554 Calculus I**
5. **GNEG 1111 Introduction to Engineering I**
   
#### Total Hours

15
Spring Semester Year 1
3  HIST 2003 or HIST 2013 or PLSC 2003
1  GNEG 1121 Introduction to Engineering II
4  MATH 2564 Calculus II
4  Freshman Science Elective (See above)
3  ENGL 1023 Technical Composition II
15  Semester Hours

Fall Semester Year 2
0  MEEG 2100 Computer-Aided Design Competency
4  Science Elective (See note above)
4  MATH 2574 Calculus III
3  MEEG 2303 Introduction to Materials
3  MEEG 2003 Statics
14  Semester Hours

Spring Semester Year 2
4  MATH 2584 Differential Equations
3  MEEG 2013 Dynamics
3  MEEG 2403 Thermodynamics
3  MEEG 2703 Computer Methods in Mechanical Engineering
3  MEEG 2103 Introduction to Machine Analysis
16  Semester Hours

Fall Semester Year 3
3  MEEG 3013 Mechanics of Materials
3  MEEG 3103 Machine Dynamics and Control
2  MEEG 3202L Mechanical Engineering Laboratory I
3  MEEG 3503 Mechanics of Fluids
3  ELEG 3903 Circuits & Machines
3  ECON 2013 or ECON 2143
17  Semester Hours

Spring Semester Year 3
2  MEEG 3212L Mechanical Engineering Laboratory II
3  MEEG 4413 Heat Transfer
4  MEEG 4104 Machine Element Design
3  ELEG 3933 Circuits and Electronics
3  Technical/Science Elective
3  PHIL 3103
18  Semester Hours

Fall Semester Year 4
2  MEEG 4132 Professional Engineering Practices
1  MEEG 4131 Creative Project Design I
2  MEEG 4202L Mechanical Engineering Laboratory III
3  MEEG 4483 Thermal Systems Analysis and Design
3  Technical/Science Elective
3  Fine Arts Elective (from University/State Core list)
14  Semester Hours

Spring Semester Year 4
3  MEEG 4133 Creative Project Design II
3  Technical/Science Elective
3  Technical/Science Elective
3  Social Science Elective (from University/State Core list)
3  Social Science Elective (from University/State Core list)
15  Semester Hours
124  Total Hours

Technical/Science Electives
The purpose of technical/science electives is to provide students with the opportunity to expand their education along lines of particular interest to them. The approved list of technical/science electives and selected courses for various options is available in the Mechanical Engineering department office.

Fine Arts/Humanities/Social Science Electives
Students must follow the University/State Core curriculum in selecting their fine arts and social science electives. See mechanical engineering office for details.

See Page 380 for Mechanical Engineering (MEEG) courses.
The primary goal of the University of Arkansas School of Law is to prepare lawyers who will render high-quality professional service to their clients, who are interested in and capable of advancing legal progress and reform, and who are prepared to be leaders in their communities. These objectives can best be realized by a talented and dedicated full-time faculty working in partnership with an interested and involved bench and bar. The faculty and administrative staff at the School of Law strive to maintain mutually beneficial relationships with judges and practicing lawyers. Appellate courts regularly schedule cases at the School of Law, and the judges meet with students informally after the arguments. Full-time faculty members teach first-year courses and other required substantive law courses, while practice skill courses such as legal clinic and activities such as moot court and client counseling depend on the assistance of the practicing bar.

The University of Arkansas School of Law also has a strong sense of responsibility to the people of Arkansas. Members of the faculty and student body are active in numerous public service activities. Legal counsel to the indigent is provided through the clinical education program and by special court appointments from time to time. Students and faculty also serve on the bar, in civic and legislative committees, and on task forces. A number of faculty and students contribute time and expertise to state agencies and law reform groups. All of these activities offer students real legal work, giving them practical legal problems to solve. These problems may involve drafting legal documents or formulating a course of action for a hypothetical client.

By the time students reach their third year, they will be prepared to engage in significant legal research in selected areas of specialization. A primary source for such experience will be seminars taught informally in small groups by professors who are experts in selected subjects. Frequently, a student will be expected to defend a seminar paper before classmates under circumstances that provide lively and constructive discussion. During the second and third years, students are also permitted to engage in research and writing projects for credit under the supervision and consultation of a selected faculty member, in an area of particular interest to the student.

Of increasing importance in legal education is the role of practical, on-the-job training involving legal problems of actual clients. Legal clinic courses provide valuable client counseling experience, as well as participation in actual trials and appeals under the supervision of a member of the faculty who is also a licensed attorney. Representation is provided for students and indigent local residents. Both civil and certain referred criminal cases are accepted by the clinic.

Many classes in the School of Law involve a significant skills component in which students are placed in a simulated client-based situation and asked to respond appropriately. The curriculum includes a number of specially designated-skills classes that focus on practice skills. All law students are required to take at least one skills class prior to graduation.

The Socratic “case method” is the basic tool of traditional American legal education. This method involves the study and discussion of litigated cases. The teacher calls upon students to respond in a stimulating question-and-answer dialogue, frequently involving several class members and often including more questions than answers. The learning experience occurs not only in the interchange between teacher and student, but also among the students themselves. This process, applied skillfully by expert teachers and by students possessing a sense of awareness and curiosity, hones the minds of students, develops their respect for facts, and creates a sensitivity to essential differences among issues, policies, reasons, and arguments. Intensive and consistent daily preparation is necessary for students to participate effectively in this process.

In some of the first-year courses, and in many later courses, students are given practical legal problems to solve. These problems may involve drafting legal documents or formulating a course of action for a hypothetical client.

By the time students reach their third year, they will be prepared to engage in significant legal research in selected areas of specialization. A primary source for such experience will be seminars taught informally in small groups by professors who are experts in selected subjects. Frequently, a student will be expected to defend a seminar paper before classmates under circumstances that provide lively and constructive discussion. During the second and third years, students are also permitted to engage in research and writing projects for credit under the supervision and consultation of a selected faculty member, in an area of particular interest to the student.

Of increasing importance in legal education is the role of practical, on-the-job training involving legal problems of actual clients. Legal clinic courses provide valuable client counseling experience, as well as participation in actual trials and appeals under the supervision of a member of the faculty who is also a licensed attorney. Representation is provided for students and indigent local residents. Both civil and certain referred criminal cases are accepted by the clinic.

Many classes in the School of Law involve a significant skills component in which students are placed in a simulated client-based situation and asked to respond appropriately. The curriculum includes a number of specially designated-skills classes that focus on practice skills. All law students are required to take at least one skills class prior to graduation.

The Socratic “case method” is the basic tool of traditional American legal education. This method involves the study and discussion of litigated cases. The teacher calls upon students to respond in a stimulating question-and-answer dialogue, frequently involving several class members and often including more questions than answers. The learning experience occurs not only in the interchange between teacher and student, but also among the students themselves. This process, applied skillfully by expert teachers and by students possessing a sense of awareness and curiosity, hones the minds of students, develops their respect for facts, and creates a sensitivity to essential differences among issues, policies, reasons, and arguments. Intensive and consistent daily preparation is necessary for students to participate effectively in this process.

In some of the first-year courses, and in many later courses, students are given practical legal problems to solve. These problems may involve drafting legal documents or formulating a course of action for a hypothetical client.

By the time students reach their third year, they will be prepared to engage in significant legal research in selected areas of specialization. A primary source for such experience will be seminars taught informally in small groups by professors who are experts in selected subjects. Frequently, a student will be expected to defend a seminar paper before classmates under circumstances that provide lively and constructive discussion. During the second and third years, students are also permitted to engage in research and writing projects for credit under the supervision and consultation of a selected faculty member, in an area of particular interest to the student.

Of increasing importance in legal education is the role of practical, on-the-job training involving legal problems of actual clients. Legal clinic courses provide valuable client counseling experience, as well as participation in actual trials and appeals under the supervision of a member of the faculty who is also a licensed attorney. Representation is provided for students and indigent local residents. Both civil and certain referred criminal cases are accepted by the clinic.

Many classes in the School of Law involve a significant skills component in which students are placed in a simulated client-based situation and asked to respond appropriately. The curriculum includes a number of specially designated-skills classes that focus on practice skills. All law students are required to take at least one skills class prior to graduation.

The Socratic “case method” is the basic tool of traditional American legal education. This method involves the study and discussion of litigated cases. The teacher calls upon students to respond in a stimulating question-and-answer dialogue, frequently involving several class members and often including more questions than answers. The learning experience occurs not only in the interchange between teacher and student, but also among the students themselves. This process, applied skillfully by expert teachers and by students possessing a sense of awareness and curiosity, hones the minds of students, develops their respect for facts, and creates a sensitivity to essential differences among issues, policies, reasons, and arguments. Intensive and consistent daily preparation is necessary for students to participate effectively in this process.

In some of the first-year courses, and in many later courses, students are given practical legal problems to solve. These problems may involve drafting legal documents or formulating a course of action for a hypothetical client.

By the time students reach their third year, they will be prepared to engage in significant legal research in selected areas of specialization. A primary source for such experience will be seminars taught informally in small groups by professors who are experts in selected subjects. Frequently, a student will be expected to defend a seminar paper before classmates under circumstances that provide lively and constructive discussion. During the second and third years, students are also permitted to engage in research and writing projects for credit under the supervision and consultation of a selected faculty member, in an area of particular interest to the student.

Of increasing importance in legal education is the role of practical, on-the-job training involving legal problems of actual clients. Legal clinic courses provide valuable client counseling experience, as well as participation in actual trials and appeals under the supervision of a member of the faculty who is also a licensed attorney. Representation is provided for students and indigent local residents. Both civil and certain referred criminal cases are accepted by the clinic.

Many classes in the School of Law involve a significant skills component in which students are placed in a simulated client-based situation and asked to respond appropriately. The curriculum includes a number of specially designated-skills classes that focus on practice skills. All law students are required to take at least one skills class prior to graduation.

The Socratic “case method” is the basic tool of traditional American legal education. This method involves the study and discussion of litigated cases. The teacher calls upon students to respond in a stimulating question-and-answer dialogue, frequently involving several class members and often including more questions than answers. The learning experience occurs not only in the interchange between teacher and student, but also among the students themselves. This process, applied skillfully by expert teachers and by students possessing a sense of awareness and curiosity, hones the minds of students, develops their respect for facts, and creates a sensitivity to essential differences among issues, policies, reasons, and arguments. Intensive and consistent daily preparation is necessary for students to participate effectively in this process.

In some of the first-year courses, and in many later courses, students are given practical legal problems to solve. These problems may involve drafting legal documents or formulating a course of action for a hypothetical client.

By the time students reach their third year, they will be prepared to engage in significant legal research in selected areas of specialization. A primary source for such experience will be seminars taught informally in small groups by professors who are experts in selected subjects. Frequently, a student will be expected to defend a seminar paper before classmates under circumstances that provide lively and constructive discussion. During the second and third years, students are also permitted to engage in research and writing projects for credit under the supervision and consultation of a selected faculty member, in an area of particular interest to the student.

Of increasing importance in legal education is the role of practical, on-the-job training involving legal problems of actual clients. Legal clinic courses provide valuable client counseling experience, as well as participation in actual trials and appeals under the supervision of a member of the faculty who is also a licensed attorney. Representation is provided for students and indigent local residents. Both civil and certain referred criminal cases are accepted by the clinic.

Many classes in the School of Law involve a significant skills component in which students are placed in a simulated client-based situation and asked to respond appropriately. The curriculum includes a number of specially designated-skills classes that focus on practice skills. All law students are required to take at least one skills class prior to graduation.

The Socratic “case method” is the basic tool of traditional American legal education. This method involves the study and discussion of litigated cases. The teacher calls upon students to respond in a stimulating question-and-answer dialogue, frequently involving several class members and often including more questions than answers. The learning experience occurs not only in the interchange between teacher and student, but also among the students themselves. This process, applied skillfully by expert teachers and by students possessing a sense of awareness and curiosity, hones the minds of students, develops their respect for facts, and creates a sensitivity to essential differences among issues, policies, reasons, and arguments. Intensive and consistent daily preparation is necessary for students to participate effectively in this process.

In some of the first-year courses, and in many later courses, students are given practical legal problems to solve. These problems may involve drafting legal documents or formulating a course of action for a hypothetical client.

By the time students reach their third year, they will be prepared to engage in significant legal research in selected areas of specialization. A primary source for such experience will be seminars taught informally in small groups by professors who are experts in selected subjects. Frequently, a student will be expected to defend a seminar paper before classmates under circumstances that provide lively and constructive discussion. During the second and third years, students are also permitted to engage in research and writing projects for credit under the supervision and consultation of a selected faculty member, in an area of particular interest to the student.

Of increasing importance in legal education is the role of practical, on-the-job training involving legal problems of actual clients. Legal clinic courses provide valuable client counseling experience, as well as participation in actual trials and appeals under the supervision of a member of the faculty who is also a licensed attorney. Representation is provided for students and indigent local residents. Both civil and certain referred criminal cases are accepted by the clinic.

Many classes in the School of Law involve a significant skills component in which students are placed in a simulated client-based situation and asked to respond appropriately. The curriculum includes a number of specially designated-skills classes that focus on practice skills. All law students are required to take at least one skills class prior to graduation.
Robert A. and Vivian Young Law Library

The Robert A. and Vivian Young Law Library includes more than 300,000 volumes, including cases and statutes from every American jurisdiction. The law library also contains a current and complete collection of legal encyclopedia, digests, tests, treaties, law reviews, reports of administrative agencies, and other government publications.

The Young Law Library is a depository for federal, state, and United Nations documents. It is the only U.N. documents library in the state and one of a few in the Midwest. The library includes a growing collection of agricultural law materials developed with assistance from the National Agricultural Law Center.

Students researching legal problems use traditional printed resources and electronic resources available across the Internet. Portals such as Loislaw.com, LEXIS, WESTLAW, the State of Arkansas Web page, the National Agriculture Law Center Web page, and the Young Law Library's Web page help students identify and use appropriate resources. Computer labs are available for student use. The School of Law also has a wireless network accessible to all students, faculty, and staff.

While primarily designed for the use of Arkansas students, the Young Law Library also serves the research needs of the bench, the bar, and the University community. The Young Law Library provides an attractive and comfortable atmosphere for study and research. Included within the Young Law Library is the Barrett Hamilton Law Library Mezzanine, a particularly attractive study and shelf space area. In addition, the main campus library, Mullins Library, is located near the Young Law Library. The two libraries work closely together to identify, acquire, and share resources throughout the campus.

Law Faculty
- Robert A. Lefler Professor Bailey (C.)
- Vincent Foster University Professor of Legal Ethics and Professional Responsibility Brill
- Clayton N. Little Professor Goforth
- E.J. Ball Professor Judges
- Wylie H. Davis Distinguished Professor Killenbeck (M.)
- Ben J. Altherheimer Professor of Legal Advocacy Leflar
- Sidney Parker Davis Jr. Professor of Business and Commercial Law Matthews
- Nathan G. Gordon Professor Nance
- William H. Enfield Distinguished Professor Sheppard
- Professors Beard, Brummer, Circo, Ewelukwa, Flaccus, Leeds, Moberly, Norvell, Schneider
- Associate Professors Buchler, Foster, Gallini, Hughes, Kelley, Killenbeck (A.), Sacharoff, Tarvin, Thompson, Young
- Assistant Professor Sampson
- Visiting Clinical Assistant Professors Doss, Gaithe
- Professor of Law Emeritus Witte

OTHER PROGRAMS

Joint J.D./M.B.A. Program (Business Administration)

The School of Law and the Sam M. Walton College of Business offer students a juris doctor (J.D.) degree and a master's of business administration (M.B.A.) degree concurrently. Students working to pursue their degrees in this joint program must gain admission to both the School of Law and the Graduate School and be accepted into the program of study leading to the M.B.A. degree. If the student is accepted into both programs, a maximum of six hours of approved upper-level elective law courses may be used as duplicate credit toward the M.B.A. degree and a maximum of six hours of approved graduate courses in business administration may be used as duplicate credit toward the J.D. degree, thus reducing the total time necessary for completion of the degrees.

Joint J.D./M.P.A. Program (Public Administration)

The department of political science, the Graduate School, and the School of Law cooperate in a dual-degree program that allows a student to pursue a juris doctor (J.D.) degree and a master's of public administration (M.P.A.) degree concurrently. Students must be admitted to the M.P.A. program, the School of Law, and the dual-degree program. If students enter the dual-degree program after enrolling in either the School of Law or the M.P.A. program, they must obtain admission to the other degree program and the dual-degree program during the first year of study.

The School of Law accepts a maximum of six hours of M.P.A. courses to satisfy requirements for the J.D. degree. To qualify for J.D. credit, the M.P.A. courses must come from a set of core courses and must be approved by the School of Law. For purposes of the M.P.A. degree, 15 hours of elective courses may be taken in the School of Law, provided they are in an area of concentration approved by the director of the M.P.A. program. Students must earn a grade of B or higher in any M.P.A. course offered for credit toward the J.D.

Students admitted to the dual-degree program may commence their studies in either the School of Law or in the M.P.A. program but must complete first year course requirements before taking courses in the other degree program. If they do not maintain the academic or ethical standards of either degree program, students may be terminated from the dual degree program. Students in good standing in one degree program but not the other may be allowed to continue in the program in which they have good standing and must meet the degree requirements of that program. If for any reason a student admitted to the dual degree program does not complete the M.P.A. degree, he or she cannot count any hours of M.P.A. courses toward the J.D. degree. Likewise, M.P.A. students may not be able to count certain law courses if they decide to discontinue their studies in the School of Law. The J.D. degree will be awarded upon completion of all degree requirements; the M.P.A. will be awarded upon completion of the comprehensive examination and the internship (and internship report), or alternately, six hours of additional coursework.

Joint J.D./M.A. Program

The School of Law and the Department of Political Science provide a dual J.D./M.A. in International Law and Politics. This program's students must be admitted both to the School of Law and the Graduate School in the Department of Political Science.

A maximum of 12 hours of approved, upper-level elective law courses may be used as credit toward the M.A. and a maximum of nine hours of approved graduate courses in political science may be used as credit toward the J.D. degree, reducing the time necessary to complete both degrees by about one academic year. The M.A. program offers a six-hour thesis or a paid, six-month internship option designed to prepare students for a career in international politics or law.

The 12 hours of M.A. courses taken in the School of Law must relate to the study of international law and be approved by the student's M.A. adviser and the Law School's Associate Dean of Academic Affairs. The nine hours of approved graduate courses in political science may include: Comparative Political Analysis; Seminar in International Politics; Seminar in Contemporary Problems; International Political Economy; and International Trade Policy. Other political science and graduate-level courses may be taken by permission. Paid internship credits cannot be applied toward the juris doctorate.

SCHOOL ADMISSION REQUIREMENTS

For complete details concerning admission to the School of Law, visit us at http://law.uark.edu/admissions.php or write to School of Law Office of Admissions, Lefler Law Center, University of Arkansas, Fayetteville, AR 72701, or telephone 479-575-3102 for a University of Arkansas School of Law Catalog of Studies or download a Catalog at http://law.uark.edu.

General Information

The School of Law's deadline for receiving a completed application is April 1. The school does not charge an application fee. Admission is only for the fall of each year, and only a full-time program is offered.

The School of Law prefers online applications. The school may request more information than is listed below, but please do not send additional materials unless requested. Each student application file will be reviewed when it is completed.
Prerequisites
Except for students in the 3/3 programs, applicants must have completed all requirements for a bachelor’s degree from an accredited institution prior to the date of enrolling in the School of Law.

CAS
Applicants must participate in the Credential Assembly Service (CAS) and be registered with CAS during the application year. Through CAS, applicants are required to send the Law School Admission Council (LSAC) official transcripts from all higher education institutions that the applicant has attended.

LSAT
Applicants also must take the Law School Admission Test (LSAT) before the end of February and within the five years preceding the date of application. Applications may be submitted prior to taking the LSAT. The School of Law will use an applicant’s highest LSAT score in calculating the applicant’s prediction index.

Prediction Index
The School of Law will grant index admission to non-residents who have a prediction index of 205 or above and to Arkansas residents who have a prediction index of 200 or above. If space permits, we may offer index admissions to other applicants. All admitted students must satisfy the legal profession’s character and fitness requirements.

The prediction index is calculated as follows: \( \text{LSAT score} + (13.4 \times \text{UGPA}) = \text{Prediction Index} \). For example, if you have an LSAT score of 160 and a 3.00 UGPA, your prediction index would be 202.

Transfer Students
A law student who has completed one year of legal studies with satisfactory scholarship in a law school accredited by the American Bar Association is eligible to be considered for transfer to the University of Arkansas School of Law. The amount of transfer credit to be granted will depend on the quality of performance and the relation of completed courses to this school's program. A maximum of 30 credits may be accepted for transfer credit. Credit or units only (not grades) are transferable. Credits will not be accepted for any course or other work in which a grade below 2.00 or equivalent is given at another law school. Failure to disclose attendance at another college or law school or expulsion or suspension is sufficient grounds to require withdrawal from the School of Law.

Pre-Law Study
No pre-law curriculum is prescribed at the University of Arkansas School of Law or at any other American law school. Experience has shown that students do equally well in law school and in law practice regardless of their differing educational backgrounds. As a result, no single “pre-law major” is required or even recommended. Students in a position to structure their college curriculum should select courses that emphasize analytical and problem-solving skills and courses in which written work is rigorously edited. Arkansas admits applicants from a wide variety of college majors. The resulting diversity enhances and enriches the educational experience of all students.

LSAT: The Law School Admission Test (LSAT) is given four times per year in Fayetteville and at other locations throughout Arkansas and in other states. Registration may be arranged online at www.lsac.org. Applicants for admission are urged to take the test at least nine months prior to expected entrance in the School of Law.

3/3 Programs
The School of Law and the J. William Fulbright College of Arts and Sciences have collaborated in developing a program that will enable outstanding students to enter the School of Law after their third year of undergraduate studies. A student enrolled in the Fulbright College is eligible to begin study in the UA School of Law after the completion of at least 94 hours of college work if the following criteria are met:

1. Completion of all University, college, and major course requirements for their undergraduate degree;
2. A cumulative grade-point average of at least 3.50; and
3. A score of at least 159 on the LSAT.

Such students will receive a Bachelor of Arts or a Bachelor of Science after the completion of sufficient hours at the School of Law in order to meet the regular requirements of Fulbright College. These students will then receive a juris doctor (J.D.) degree after completing the required number of hours at the School of Law.

In addition to the 3/3 program with the J. William Fulbright College of Arts and Sciences, the School of Law has a similar program with the department of agricultural economics and agribusiness in the Dale Bumpers College of Agricultural, Food, and Life Sciences. Exceptional students may enroll in the Law School in their fourth year of undergraduate study. Students will be required to have (1) completed at least 95 credit hours in the pre-law program, (2) a cumulative grade-point average in all college or University course work of at least 3.50 without grade renewal, and (3) an LSAT score of at least 159. The B.S.A. Agricultural Business degree will be granted after successfully completing 29 credit hours from the first-year School of Law course work.

It is a requirement of the School of Law’s accreditation standards that no student be admitted to the University of Arkansas School of Law until they have completed at least three-fourths of the work necessary for the baccalaureate degree. The requirements embodied in these 3/3 programs satisfy this requirement.

COLLEGE SCHOLARSHIPS
Students are expected to make sufficient financial arrangements for the first year of study without the necessity of seeking employment. All law students are required to be full-time students, and no law student is permitted more than 20 hours per week of employment. First-year students are strongly discouraged from working while enrolled in classes. First-year students are expected to adhere to a standard curriculum; some courses in the upper-division curriculum are also required.

Applications for financial aid may be obtained from the Office of Financial Aid, University of Arkansas, Hunt Hall 114, Fayetteville, AR 72701, 479-575-3806. You may also find more information about financial aid opportunities online at http://www.uark.edu/admit/fininfo/index.html. Applications for financial aid must be submitted to the Office of Financial Aid by April 1. Specific fees and costs are listed in the School of Law Catalog.

DEGREE REQUIREMENTS
For course information and degree requirements, see the School of Law Catalog online at http://catalogofstudies.uark.edu/2692.php. For financial aid information, see the Office of Financial Aid, University of Arkansas, Hunt Hall 114, Fayetteville, AR 72701, 479-575-3806.

GRADUATE STUDIES
The University of Arkansas School of Law is a professional degree program. In addition to the law degree, the Law School offers a graduate degree in agricultural law. The Graduate Program in Agricultural Law at the University of Arkansas is the only program in the United States that offers a Master of Laws (LL.M.) degree in agricultural law. Students enrolled in this unique and selective program have the opportunity for advanced study, creative research, and specialized professional training in the legal issues involved with agricultural production, marketing, and distribution. Graduates of the program are among the leaders of today's agricultural law community, working in private practice, government, agribusiness, public policy, and academia. For more information, visit http://law.uark.edu/llm_program.php or e-mail the graduate program at llm@uark.edu.

ACCREDITATIONS
The degree programs in the School of Law on the Fayetteville campus are accredited by both the American Bar Association and the Association of American Law Schools.
Reserve Officer Training Corps

Air Force ROTC
319 Memorial Hall, 479-575-3651/3652, E-mail: rotc030@uark.edu
Professor of Aerospace Studies
Lieutenant Colonel Mark Clark
World Wide Web
http://www.uark.edu/~afrotc/

Army ROTC
106 Army ROTC Building, 479-575-4251
Toll Free: 1-866-891-5538, Fax: 479-575-5855
E-mail: armyrotc@cavern.uark.edu
Professor of Military Science and Leadership
Lieutenant Colonel Clark B. Taylor
World Wide Web
http://www.uark.edu/armyhog/

The Reserve Officer Training Corps (ROTC) programs at the University of Arkansas provide physical and mental challenges that are not offered anywhere else on campus. The ROTC programs prepare young men and women for careers as professional military officers. In addition to academic studies, each service requires that all students attend a weekly leadership laboratory.

The freshman and sophomore courses are electives offered to male and female students who may earn four hours of academic credit in Aerospace Studies or up to six hours in Military Science. Absolutely no military obligation is incurred by non-scholarship students as a result of their enrollment in or completion of any or all of their freshman or sophomore ROTC courses.

U.S. AIR FORCE ROTC

In addition to the first two years of academic study (see above), the University, in cooperation with the U.S. Air Force, offers two years of advanced instruction in Aerospace Studies. The advanced instruction prepares students for the responsibilities and privileges of a commissioned officer. This advanced instruction offers three hours of academic credit per semester for Air Force cadets.

Air Force ROTC (AFROTC) cadets must attend and successfully complete field training. AFROTC cadets usually attend field training between their sophomore and junior years. Air Force ROTC cadets may volunteer to attend various professional development courses during their non-field-training summers.

Each student must successfully complete the summer field training to qualify for the advanced ROTC program. All veterans who have completed basic training and 180 days of service with any component of the U.S. Armed Forces are exempt from the freshman AFROTC course.

Financial assistance is also available in the form of monthly stipends for cadets officially enrolled in the advanced training program, who have successfully completed summer field training. Additionally, Air Force ROTC offers four-, three-, and two-year scholarships to competitively selected students. All scholarship students receive a monthly tax-free allowance ranging from $300 to $450, payment of tuition expenses, textbook payment, and payment of certain other fees. Additional information and applications for this assistance may be obtained on the Web at http://www.afrotc.com/.

A student who successfully completes the Advanced Course in Air Force ROTC and receives a degree will be awarded a commission and will serve on active duty in the U.S. Air Force.

All textbooks, instructional material, and equipment required for ROTC courses are furnished at no cost to the student.

See Page 310 for U.S. Air Force ROTC (AERO) courses.

U.S. ARMY ROTC

In addition to the first two years of academic study, the University, in cooperation with the U.S. Army, offers two years of advanced instruction in Military Science, Leadership, Ethics, and Personal Confidence. The advanced instruction prepares students for the responsibilities and privileges of a commissioned officer. This advanced instruction offers four hours of academic credit per semester for Army cadets. Additionally, all students enrolled in the final two years of ROTC receive a monthly tax-free allowance ranging from $450 to $500.

Army ROTC cadets attend a paid 28-day Leadership Development and Assessment Course (LDAC) between their junior and senior school years. Cadets may attend professional development training such as Leadership Internships, Airborne, Air Assault, British Exchange Program, Northern Warfare, Nurse Summer Training Program, Mountain Warfare and Cultural Immersion Overseas Program in the summer during their sophomore year. During summer field training, cadets receive room and board.

For students having a minimum of two academic years in school remaining (undergraduate, graduate, or a combination of the two), an alternate two-year program is offered. Students entering the two-year ROTC program attend a 28-day Leaders Training Course (LTC) during the summer. Students who attend LTC and are otherwise qualified are eligible for two-year scholarships. Rising juniors, seniors and graduate students who meet the U.S. Army Cadet Command’s Scholar-Athlete-Leader criteria and are unable to attend the LTC may elect to participate in the Accelerated Cadet Commissioning Training (ACCT) program conducted on the UA campus.

Students with high school-level military schooling (JROTC, NDCC, or Military Academy) may qualify for the advanced ROTC program without completing the freshman or sophomore courses. All veterans who have completed basic training and 180 days of service with any component of the U.S. Armed Forces can receive full credit for the freshman and sophomore courses and may enter ROTC at the advanced level, once junior academic standing has been achieved.

Financial assistance is also available to qualified students enrolled in ROTC.
The Army offers two, two-and-one-half, three, three-and-one-half, and four-year scholarships. Freshman or sophomore students who are not enrolled in Army ROTC may qualify for on-campus two or three-year scholarships. Juniors, seniors, and graduate students who have at least two full years of college remaining may also qualify for on-campus two or three-year scholarships. Scholarships can be used to pay for graduate school. Scholarship students receive a monthly tax-free allowance ranging from $300 to $500, payment of all tuition expenses, textbook payment ($1,200 per year), and payment of certain other fees. Additionally, some qualified three- and four-year scholarship winners may receive free room and board, provided they meet the University of Arkansas requirements for the Room and Board Scholarship.

Army ROTC scholarship and advanced course students must agree to successfully complete at least one semester of American Military History, LDAC, and a Staff Ride (Terrain Walk) prior to commissioning. Depending on the degree plan, Army ROTC may count from zero to 19 hours of elective credits for undergraduate students.

Army ROTC also offers a unique financial assistance program available to all non-scholarship Army ROTC Advanced Course students through the Simultaneous Membership Program (SMP). This program allows students with 27 or more hours to be enrolled in Army ROTC while simultaneously serving with an Army Reserve or Army National Guard unit. Financial benefits of this program presently provide approximately $600 to $1,700 per month to enrolled students. Prior Service National Guard and Army Reserve students may also qualify for the Montgomery G.I. Bill, MGIB Kicker, the Veterans Administration Workstudy Program, Federal Tuition Assistance, and/or the Arkansas Army National Guard Tuition Assistance Program. Army ROTC Scholarship Nurse Cadets may also receive reimbursement for expenses related to Nursing Uniforms, Immunizations, Clinical Fees, Nursing Malpractice Insurance and the NCLX-RN review and testing.

A student who successfully completes the Advanced Course in the Army ROTC program and receives a degree may be accepted for a regular or reserve commission in one of the sixteen branches of the Army.

All textbooks, instructional material, and equipment required for ROTC courses are furnished at no cost to students.

See Page 383 for U.S. Army ROTC (MILS) courses.
Faculty

The first date after the listing of each name indicates the year of first appointment at the University; the second date indicates the year of appointment to present faculty rank. Where they coincide, only one date is given.

Acknowledgments, Michael Dean – B.S.Ch.E., M.S.Ch.E. (University of Missouri-Rolla), Ph.D. (University of Arkansas), PE., Associate Professor of Chemical Engineering, 1988, 1992.


Adams, Paul – B.S. (Louisiana State University), Ph.D. (Case Western Reserve University), Associate Professor of Chemistry and Biochemistry, 2007, 2012.

Adkins, Charles W. Jr. – B.S. (University of Central Arkansas), L.E. (U.S. Army Logistics Management College), Major (U.S. Army, Quartermaster Corps), Assistant Professor of Military Science and Leadership, 2001.

Adler, Jacob – A.B., Ph.D. (Harvard University), Associate Professor of Philosophy, 1984, 1991.

Agan, Joseph P. – B.S. (Southern Illinois State University), M.A. (University of Houston), Ph.D. (University of Arkansas), Clinical Assistant Professor of Communication Disorders, 2009.


Akin, D. Scott – B.S. (University of Tennessee, Martin), M.S., Ph.D. (Mississippi State University), Assistant Professor of Entomology, 2007.

Alexander, Jerry W. – B.A. (Western Kentucky University), M.A. (Texas Tech University), Visiting Assistant Professor of Operations Management, 2002.

Allen, Carolyn Henderson – B.S. (Alabama State University), M.S. (Clark Atlanta University), Professor and Dean of University Libraries, 2000.


Allison, Neil T. – B.S. (Georgia College), Ph.D. (University of Florida), Associate Professor of Chemistry and Biochemistry, 1980, 1985.


Amason, Patricia – B.S.E. (University of Arkansas), M.A. (University of Kentucky), Ph.D. (Purdue University), Associate Professor of Management, 1994, 2000.


Anders, Merle M. – B.S. (Iowa State University of Science and Technology), M.S., Ph.D. (University of Hawaii), Research Assistant Professor of Rice Cropping Systems, 1998.

Andersen, Craig R. – B.S. (Augustana College), M.S., Ph.D. (University of Minnesota), Associate Professor of Horticulture, 1985, 1995.

Andrews, David L. – B.S.E.E., M.S.E.E. (University of Missouri-Columbia), Ph.D. (Syracuse University), Thomas Mullins Chair and Professor of Computer Science and Computer Engineering, 2008.

Ang, Simon S. – B.S.E.E. (University of Arkansas), M.S.E.E. (Georgia Institute of Technology), Ph.D. (Southern Methodist University), P.E., Professor of Electrical Engineering, 1988, 1995; Adjunct Professor of Biological and Agricultural Engineering, 2003.

Anthony, Nicholas B. – B.S., M.S. (Ohio State University), Ph.D. (Virginia Polytechnic Institute and State University), Professor of Poultry Science, 1987, 2000.

Antoine, Pierre Ph. – B.S. (University of Louvain, Belgium), Ph.D. (University of Minnesota), Adjunct Professor of Agronomy, 1987.

Anton, Nikolay – B.A. (American University in Bulgaria), M.A. (Bilkent University, Turkey), Ph.D. (University of Chicago), Assistant Professor of History, 2011.

Apple, Jason K. – B.S. (Oklahoma State University), M.S., Ph.D. (Kansas State University), Professor of Animal Science, 1995, 2007.

Apple, Laurie M. – B.S., M.S. (University of Arkansas), Ph.D. (Oklahoma State University), Associate Professor of Human Environmental Sciences, 2000, 2008.

Arenberg, Nancy – B.A. (Grinnell College), M.A. (University of Illinois, Champaign-Urbana), Ph.D. (University of Arizona, Tucson), Associate Professor of World Languages, 1996, 2002.


Arnold, Mark E. – B.S., Ph.D. (Northern Illinois University), Associate Professor of Mathematical Sciences, 1993, 1999.

Arrington, Andrea L. – B.A. (Knox College), M.A., Ph.D. (Emory University), Assistant Professor of History, 2007.

Ashton, Dub – B.S.B.A., M.B.A. (Memphis State University), Ph.D. (University of Georgia), Associate Professor of Marketing, 1981.


Babcock, Robert E. – B.S., M.S., Ph.D. (University of Missouri), Research Associate Professor of Chemical Engineering, 1965, 1974.

Bacon, Craig D. – B.S. (University of Missouri), M.S., Ph.D. (University of Tennessee), Adjunct Professor of Poultry Science, 2011.

Bacon, Robert K. – B.S.A., M.S. (University of Arkansas), Ph.D. (Purdue University), Professor of Crop, Soil, and Environmental Sciences, 1984, 1993.

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree Details</th>
<th>Title/Position Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baker, Lindlee A.</td>
<td>M.Sc. (London School of Economics and Political Science), J.D. (University of Arkansas), Clinical Associate Professor of Law, 1994, 2002.</td>
<td></td>
</tr>
<tr>
<td>Baker, Kimberly F.</td>
<td>B.S., M.S. (University of Arkansas), Ph.D. (University of South Carolina), Assistant Professor of Communication Disorders, 2007.</td>
<td></td>
</tr>
<tr>
<td>Baldwin, Vernoice G.</td>
<td>B.S., M.S. (University of Arkansas), Director of Nursery School and Infant Development Center for the School of Human Environmental Sciences, 1996.</td>
<td></td>
</tr>
<tr>
<td>Ballard, Karen K.</td>
<td>B.A., M.S.W., Ed.D (University of Arkansas), Adjunct Professor of Agricultural and Extension Education, 2009.</td>
<td></td>
</tr>
<tr>
<td>Bamberger, Uta</td>
<td>M.A. (University of California, Santa Barbara), Ph.D. (University of Massachusetts), Assistant Professor of World Languages, 1997.</td>
<td></td>
</tr>
<tr>
<td>Banerjee, Nilanjana</td>
<td>B.Tech. (Indian Institute of Technology), M.S., Ph.D. (University of Massachusetts), Assistant Professor of Computer Science and Computer Engineering, 2009.</td>
<td></td>
</tr>
<tr>
<td>Barraza-Lopez, Salvador</td>
<td>B.S. (Instituto Politecnico Nacional de Mexico), Ph.D. (University of Illinois), Assistant Professor of Physics, 2011.</td>
<td></td>
</tr>
<tr>
<td>Barnes, Jeffery K.</td>
<td>B.S. (University of Rochester), M.S., Ph.D. (Cornell University), Curator in Entomology, 2002.</td>
<td></td>
</tr>
<tr>
<td>Barta, Kathleen M.</td>
<td>B.S. (Marquette University), M.S. (Boston College), Ed.D. (University of Arkansas), Associate Professor of Nursing, 1984, 1998.</td>
<td></td>
</tr>
<tr>
<td>Baum, Jamie</td>
<td>B.S., Ph.D. (University of Illinois at Urbana-Champaign), Assistant Professor of Nutrition, 2011.</td>
<td></td>
</tr>
<tr>
<td>Beasley, Jennifer</td>
<td>B.A. (Kansas State University), M.Ed. (Wichita State University), Ed.D. (University of Virginia), Assistant Professor of Curriculum and Instruction, 2009, 2010.</td>
<td></td>
</tr>
<tr>
<td>Beaufre, Steven J.</td>
<td>B.S., M.S. (University of Wisconsin), Ph.D. (University of Pennsylvania), Professor of Biological Sciences, 1995, 2006.</td>
<td></td>
</tr>
<tr>
<td>Beavers, Gordon</td>
<td>B.S., M.S. (University of Texas), Ph.D. (Indiana University), Associate Professor of Computer Science and Computer Engineering, 2002.</td>
<td></td>
</tr>
<tr>
<td>Beck, Jules</td>
<td>B.A., M.S., Ph.D. (University of Minnesota), Clinical Assistant Professor of Human Resource and Workforce Development, 2005.</td>
<td></td>
</tr>
<tr>
<td>Beck, Paul</td>
<td>B.S., M.S. (Oklahoma State), Ph.D. (University of Arkansas), Associate Professor of Animal Science, 2004, 2008.</td>
<td></td>
</tr>
<tr>
<td>Beitel, Robert R.</td>
<td>B.S.Ch.E., M.S.Ch.E., Ph.D. (University of Pittsburgh), P.E., Professor of Chemical Engineering, 1993, 2006.</td>
<td></td>
</tr>
<tr>
<td>Bell, Karmen V.</td>
<td>B.A. (Indiana Wesleyan University), M.Ed. (Texas A&amp;M University), Clinical Instructor of Elementary Education, 2007.</td>
<td></td>
</tr>
<tr>
<td>Bell, Steven M.</td>
<td>B.A. (University of Kansas), M.A. (University of Kentucky), Ph.D. (University of Kansas), Associate Professor of World Languages, 1992, 1996.</td>
<td></td>
</tr>
<tr>
<td>Bellaiche, Laurent</td>
<td>B.S., M.S., Ph.D. (University of Paris VI, France), Professor of Physics, 1999, 2005.</td>
<td></td>
</tr>
<tr>
<td>Benamom, Johnny C.</td>
<td>M.S., M.P.A. (University of Mississippi), Visiting Assistant Professor of Operations Management, 2000.</td>
<td></td>
</tr>
<tr>
<td>Bengtson, Ed</td>
<td>B.S. (Pennsylvania State University), M.A. (California State University-Sacramento), Ed. S. (George Washington University), Ph. D. (University of Georgia), Assistant Professor of Curriculum and Instruction, 2010.</td>
<td></td>
</tr>
<tr>
<td>Bennett, A. Rick</td>
<td>B.S. (Shippensburg State University), M.S. (Colorado State University), Ph.D. (West Virginia University), Professor of Plant Pathology, 2009.</td>
<td></td>
</tr>
<tr>
<td>Benton, Gregory M.</td>
<td>B.A. (University of California-Santa Barbara), M.S. (Indiana University), Ph.D. (Indiana University), Assistant Professor of Recreation and Sport Management, 2007.</td>
<td></td>
</tr>
<tr>
<td>Bernhardt, John L.</td>
<td>B.S., M.S. (East Carolina University), Ph.D. (Clemson University), Assistant Professor of Entomology, 1979.</td>
<td></td>
</tr>
<tr>
<td>Berthelot, Ronald J.</td>
<td>B.S. (Southeastern Louisiana University), M.S., Ed.D (University of Tennessee), Visiting Assistant Professor of Operations Management, 1993.</td>
<td></td>
</tr>
<tr>
<td>Billig, Noah</td>
<td>B.A., M.L.A., M.Ur.P (University of Minnesota), Ph.D. (Clemson University), Garvan Chair and Visiting Assistant Professor of Landscape Architecture, 2011.</td>
<td></td>
</tr>
<tr>
<td>Billings, Sabrina</td>
<td>B.A. (University of Kentucky), Ph.D. (University of Chicago), Assistant Professor of World Languages, 2007.</td>
<td></td>
</tr>
<tr>
<td>Blackwell, Marlon M.</td>
<td>B.Arch. (Auburn University), M.Arch. (Syracuse University), Distinguished Professor of Architecture, 1992, 2010.</td>
<td></td>
</tr>
<tr>
<td>Bluhm, Burton</td>
<td>B.S. (University of Oklahoma), M.S., Ph.D. (Purdue University), Assistant Professor of Plant Pathology, 2008.</td>
<td></td>
</tr>
<tr>
<td>Bobbitt, Donald R.</td>
<td>B.S. (University of Arkansas), Ph.D. (Iowa State University), Professor of Chemistry and Biochemistry, 2011.</td>
<td></td>
</tr>
<tr>
<td>Bobda, Christophe</td>
<td>B.S. (University of Yaounde, Cameroon), M.S., Ph.D. (University of Paderborn), Associate Professor, Computer Science and Computer Engineering, 2010.</td>
<td></td>
</tr>
<tr>
<td>Bonaccio, Jeffrey A.</td>
<td>B.S. (University of Akron), M.S. (West Virginia University), D.A. (Middle Tennessee State University), Clinical Assistant Professor of Kinesiology, 2000.</td>
<td></td>
</tr>
<tr>
<td>Bonanno, F. Ramon</td>
<td>B.S. (U.S. Military Academy), M.S. (Iowa State University), Ph.D. (University of Arizona), Visiting Assistant Professor of Operations Management, 1994.</td>
<td></td>
</tr>
<tr>
<td>Booker, M. Keith</td>
<td>B.A. (Vanderbilt University), M.S., M.A. (University of Tennessee), Ph.D. (University of Florida), Professor of English, 1990, 1997.</td>
<td></td>
</tr>
<tr>
<td>Boss, Stephen K.</td>
<td>B.S. (Bemidji State University), M.S. (Utah State University), Ph.D. (University of North Carolina, Chapel Hill), Professor of Geology, 1996, 2010.</td>
<td></td>
</tr>
<tr>
<td>Bourland, Fred M.</td>
<td>B.S.A., M.S. (University of Arkansas), Ph.D. (Texas A&amp;M University), Professor of Crop, Soil, and Environmental Sciences at Northeast Research and Extension Center, 1988.</td>
<td></td>
</tr>
<tr>
<td>Bowles, Freddie A.</td>
<td>B.A. (University of Central Arkansas), M.A., Ph.D. (University of Arkansas), Assistant Professor of Foreign Language Education, 2007.</td>
<td></td>
</tr>
<tr>
<td>Boyer, Mark E.</td>
<td>B.S.L.Arch. (University of Kentucky), M.L.Arch. (Louisiana State University), Professor of Landscape Architecture, 1998, 2011.</td>
<td></td>
</tr>
<tr>
<td>Bradley, Mindy S.</td>
<td>B.A. (University of West Georgia), M.A., Ph.D. (Pennsylvania State University), Associate Professor of Sociology and Criminal Justice, 2005, 2010.</td>
<td></td>
</tr>
<tr>
<td>Brady, Robert M.</td>
<td>B.S. (Murray State University), M.A. (Western Kentucky University), Ph.D. (University of Michigan), Associate Professor of Communication, 1979, 1985.</td>
<td></td>
</tr>
<tr>
<td>Brahan, John Van</td>
<td>A.B. (University of Illinois), M.A., Ph.D. (University of Missouri), Professor of Geosciences (Geology), 1999.</td>
<td></td>
</tr>
<tr>
<td>Bramwell, Keith</td>
<td>B.A. (Brigham Young University), M.S., Ph.D. (University of Georgia), Associate Professor and Extension Poultry Specialist III in Poultry Science, 2000.</td>
<td></td>
</tr>
<tr>
<td>Breaux, Denise</td>
<td>B.S., M.B.A. (Nichols State University), Ph.D. (Florida State University), Assistant Professor of Management, 2010.</td>
<td></td>
</tr>
</tbody>
</table>
Brewer, Dennis W. – B.A. (Sterling College), M.A., Ph.D. (University of Wisconsin), Professor of Mathematical Sciences, 1975, 1990.

Bridges, Ana J. – B.A. (University of Illinois), M.A. (Illinois State University), Ph.D. (University of Rhode Island), Assistant Professor of Psychology, 2007.


Brister, Roy – B.S., M.S., Ph.D. (Texas A&M University), Adjunct Professor of Poultry Science, 1994.


Brock, Geoffrey – B.A. (Florida State University), M.A., Ph.D. (University of Pennsylvania), Associate Professor of English, 2005, 2009.


Brooks, Steven A. – B.S. (University of Alaska-Fairbanks), M.S. (Southern Connecticut State University), Ph.D. (Kansas State University), Adjunct Associate Professor of Plant Pathology, 2007.


Brown, Arthur V. – B.S., M.A. (Sam Houston State University), Ph.D. (North Texas State University), Associate Professor of Biological Sciences, 1974, 1981.

Brown, Deborah A. – B.S., M.A. (Southeast Missouri State University), Ed.D. (University of Missouri), Clinical Assistant Professor, 2011.

Brown, Michael A. – B.S., M.S., Ph.D. (Oklahoma State University), Adjunct Professor of Animal Science, 1999, 2011.


Broyles, John F. – B.S. (Georgia Institute of Technology), Professor of Kinesiology, 1970.

Brubaker, Robert – B.S. (Grinnell), M.A. (University of Wisconsin-Milwaukee), Ph.D. (University of Michigan), Visiting Assistant Professor of History, 2009.


Bryant, Kelly J. – B.S., M.S. (University of Arkansas), Ph.D. (Texas A&M), Adjunct Associate Professor of Agricultural Economics and Agribusiness, 1993, 2000.


Buehler, Dustin – B.A. (Williams College), J.D. (University of Washington), Assistant Professor of Law, 2010.

Buescher, Ronald W. – B.S., M.S., Ph.D. (Purdue University), Professor of Food Science, 1973, 1981.


Burke, Joan M. – B.S. (Cornell University), M.S. (University of Maine), Ph.D. (Oregon State University), Adjunct Professor of Animal Science, 2001, 2011.

Burleigh, Joseph G. – B.S. (University of Southwest Louisiana), M.S. (Louisiana State University), M.S. (University of Central Arkansas), Ph.D. (Louisiana State University), Adjunct Professor of Entomology, 1982, 1992.

Burton, Bill – B.S.N. (Southwest Missouri State University), M.S.N. (University of Missouri, Kansas City), Ph.D. (University of Arkansas for Medical Sciences), Assistant Professor of Nursing, 2000, 2008.


Bustamante, Juan José – B.A., M.S., (University of Texas Pan American), Ph.D. (Michigan State University), 2012.

Buyurgan, Nebil – B.S. (Istanbul Technical University), M.S., Ph.D. (University of Missouri-Rolla), Associate Professor of Industrial Engineering, 2004, 2010.

Cai, Liang – B.A. (Renmin University of China), M.A., Ph.D. (Cornell University), Assistant Professor of History, 2008.

Caldwell, James D. – B.S. (Morehead State University), M.S., Ph.D. (University of Arkansas), Adjunct Assistant Professor of Animal Science, 2001.

Calleja, Paul – B.S. (San Jose State University), M.S., Ph.D. (University of Arkansas), Clinical Assistant Professor of Kinesiology, 2005, 2009.


Capogna, Luca – B.S. (Second University of Rome), Ph.D. (Purdue University), Professor of Mathematical Sciences, 1999, 2008.

Carde, Sarah – B.S.E., M.S.E. (Henderson State University), Ed.D. (University of Arkansas), Visiting Assistant Professor of Vocational and Adult Education, 1995.


Carpenter, Dale – B.A. (Vanderbilt University), M.A. (Emory University), Professor of Journalism, 1994, 2006.

Carpenter, Shannon – B.A., B.S. (University of Arkansas), M.S. (University of Memphis), Instructor of Human Environmental Sciences, 2009.

Carrier, Danielle J. – B.S., M.S., Ph.D. (McGill University, Canada), Professor of Biological and Agricultural Engineering, 2000, 2009.


Cartwright, D. Kelly – B.S.A. (University of Arkansas), M.S. (University of Arkansas), Ph.D. (North Carolina State University), Adjunct Assistant Professor of Plant Pathology, 2004.


Casana, Jesse – B.A. (University of Texas, Austin), M.A., Ph.D. (University of Chicago), Associate Professor of Anthropology, 2004, 2009.

Casey, Erin M. – B.A. (Louisiana State University, M.A. (University of Houston), Ph.D. (University of Arkansas), Clinical Assistant Professor of Curriculum and Instruction, 2010.

Cassady, C. Richard – B.S., B.S.E., M.S., Ph.D. (Virginia Tech University), Professor of Industrial Engineering, 2000, 2008.

Cassell, Cory – B.S., M.S. (Tulany University), Ph.D. (Texas A&M University), Assistant Professor of Accounting, 2009.

Cavallerio, Jonathan J. – B.A. (Georgetown University), M.A. (Pennsylvania State University), Ph.D. (Indiana University), Assistant Professor of Communication, 2010.

Cavell, T. A. – B.A. (Louisiana State University), M.S. (Texas A & M University), Ph.D. (Louisiana State University), Professor of Psychology, 2002.


Chamberlain, Benjamin – B.M. (University of Minnesota), M.M. (Louisiana State University), Visiting Assistant Professor, 2011.


Chauri, Indrajeet – B.S. (Agricultural Engineering, University of Allahabad, India), M.S.B.A.E. (University of Arkansas), Ph.D. (Oklahoma State University), Adjunct Associate Professor of Biological and Agricultural Engineering, 2006.
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheung, H. Michael</td>
<td>B.S. (Case Institute of Technology), M.S., Ph.D. (Case Western Reserve University), Adjunct Professor of Chemical Engineering, 2006.</td>
</tr>
<tr>
<td>Chen, Jingyi</td>
<td>B.S. (Zhongshan University), M.A. (State University College at Buffalo), Ph.D. (University of Washington) 2010.</td>
</tr>
<tr>
<td>Chen, Peng Yin</td>
<td>B.S., M.S. (Northwestern University of Agriculture), Ph.D. (Virginia Tech), Professor of Crop, Soil, and Environmental Sciences, 2001, 2009.</td>
</tr>
<tr>
<td>Cheramie, Lance</td>
<td>B.S. (Nicholls State University), M.S. (University of Arkansas), Instructor of Apparel Studies, 2011.</td>
</tr>
<tr>
<td>Chewning, Jeffrey</td>
<td>B.S. (Western Kentucky University), M.S. (University of Missouri), Ph.D. (University of Arkansas), Adjunct Professor of Animal Science, 1997, 2011.</td>
</tr>
<tr>
<td>Chi, Sabrina</td>
<td>B.B.A. (National Taiwan University), M.S. (University of Illinois), M.S. (University of Virginia), Ph.D. (University of California-Irvine), Assistant Professor of Accounting, 2010.</td>
</tr>
<tr>
<td>Chima, Justin R.</td>
<td>B.S., M.S.I.E., Ph.D. (University of Pittsburgh), Associate Professor of Industrial Engineering, 2002, 2009.</td>
</tr>
<tr>
<td>Chism, Stephen J.</td>
<td>B.A. (University of Arkansas), M.L.S. (University of Kentucky), Associate Professor and Associate Librarian, 1984, 1990.</td>
</tr>
<tr>
<td>Cholthitchanta, Nophachai</td>
<td>B.M. (Chulalongkorn University, Thailand), M.M. (University of Northern Colorado), D.M.A. (University of Missouri-Kansas City), Associate Professor of Music, 2001, 2009.</td>
</tr>
<tr>
<td>Christiansen, Hope L.</td>
<td>B.A., M.A. (Kansas State University, Kansas), Ph.D. (University of Kansas), Associate Professor of World Languages, 1990, 1996.</td>
</tr>
<tr>
<td>Christy, Kameri</td>
<td>B.A. (University of Missouri – Kansas City), M.S.W., Ph.D. (University of Kansas), Associate Professor of Social Work, 2003, 2007.</td>
</tr>
<tr>
<td>Cicco, Carl J.</td>
<td>B.A. (University of Nebraska, J.D. (University of Nebraska School of Law), Professor of Law, 2003, 2007.</td>
</tr>
<tr>
<td>Civielli, Andrea</td>
<td>B.A. (Bocconi University, Milan), Ph.D. (Princeton University), Assistant Professor of Economics, 2011.</td>
</tr>
<tr>
<td>Clark, John R.</td>
<td>B.S. (Mississippi State University), Ph.D. (University of Arkansas), University Professor of Horticulture, 1983, 2009.</td>
</tr>
<tr>
<td>Clark, Mark S.</td>
<td>B.A. (University of Alaska, B.S. (Wayland Baptist University), M.S. (Embry-Riddle Aeronautical University), Lt. Col. USAF, Professor of Aerospace Studies, 2009.</td>
</tr>
<tr>
<td>Clausen, Edgar C.</td>
<td>B.S.Ch.E., M.S.Ch.E., Ph.D. (University of Missouri-Rolla), PE., Professor of Chemical Engineering, 1981, 1985.</td>
</tr>
<tr>
<td>Clifford, Heath</td>
<td>B.A. (University of Louisville), M.A. (Eastern Kentucky University), Instructor of Kinesiology, 1996.</td>
</tr>
<tr>
<td>Coblenz, Wayne K.</td>
<td>B.A. (Western Maryland College), M.S. (Pennsylvania State University, Ph.D. (Kansas State University), Adjunct Professor of Animal Science, 2005, 2011.</td>
</tr>
<tr>
<td>Cochran, Mark J.</td>
<td>B.S. (New Mexico State University), M.S., Ph.D. (Michigan State University), Professor of Agricultural Economics and Agribusiness, 1982, 1991.</td>
</tr>
<tr>
<td>Cochran, William A.</td>
<td>B.A. (Austin College), M.S. (Trinity University), Ph.D. (University of Arkansas), Clinical Assistant Professor of Rehabilitation, 1986.</td>
</tr>
<tr>
<td>Coffey, Kenneth</td>
<td>B.S. (University of Tennessee), M.S. (University of Kentucky), Ph.D. (University of Missouri), Professor of Animal Science, 1996, 2003.</td>
</tr>
<tr>
<td>Coffman, Richard A.</td>
<td>B.S.C.E. (University of Wyoming), M.S.E. (University of Texas), Ph.D. (University of Missouri), P.E., P.L.S., Assistant Professor of Civil Engineering, 2009.</td>
</tr>
<tr>
<td>Coker, Clifford M. Jr.</td>
<td>B.S., M.S. (University of Arkansas), Associate Professor and Extension Specialist of Plant Pathology, 2003.</td>
</tr>
<tr>
<td>Cole, Jack H.</td>
<td>B.S., M.S., Ph.D. (Oklahoma State University), PE., Adjunct Professor of Mechanical Engineering, 2004.</td>
</tr>
<tr>
<td>Collie, Michael</td>
<td>B.A. (University of Arkansas), M.S.W. (University of Arkansas at Little Rock), Visiting Assistant Professor of Social Work,2008.</td>
</tr>
<tr>
<td>Collie, Sara</td>
<td>B.A. (University of Arkansas), M.S.W. (University of Arkansas at Little Rock), Clinical Assistant Professor of Social Work, 2011.</td>
</tr>
<tr>
<td>Collier, James A.</td>
<td>B.S.I.E. (University of Arkansas), M.S.I.E. (Purdue University), Visiting Assistant Professor of Operations Management, 2000.</td>
</tr>
<tr>
<td>Collins, Kathleen A.</td>
<td>B.A., M.A. (University of California at Santa Barbara), Professor of Special Education, 2002, 2011.</td>
</tr>
<tr>
<td>Condray, Kathleen</td>
<td>B.A. (University of Arkansas), M.A., Ph.D. (University of Illinois at Urbana-Champaign), Associate Professor of World Languages, 2002, 2008.</td>
</tr>
<tr>
<td>Conge, Patrick J.</td>
<td>B.S., M.A. (Arizona State University), Ph.D. (University of Texas), Associate Professor of Political Science, 1996, 2002.</td>
</tr>
<tr>
<td>Connors, Sean R.</td>
<td>B.A. (SUNY Geneseo), M.S. (Elmira College), Ph. D. (Ohio State University), Assistant Professor of Secondary English Education, 2010.</td>
</tr>
<tr>
<td>Conway, Cheryl L.</td>
<td>B.S. (Southwest Missouri State University), M.A. (University of Arkansas), M.S. (University of Arizona), Associate Professor and Associate Librarian, 1981, 1986.</td>
</tr>
<tr>
<td>Coon, Craig</td>
<td>B.S., M.S., Ph.D. (Texas A&amp;M University), Professor of Poultry Science, 1997.</td>
</tr>
<tr>
<td>Coon, Lynda L.</td>
<td>B.A. (James Madison University), M.A., Ph.D. (University of Virginia), Professor of History, 1990, 2011.</td>
</tr>
<tr>
<td>Cooper, Dixon</td>
<td>B.S., M.S. (University of North Texas), Instructor of Accounting, 2010.</td>
</tr>
<tr>
<td>Correll, James C.</td>
<td>B.S. (Pennsylvania State University), M.S., Ph.D. (University of California, Berkeley), Professor of Plant Pathology, 1989, 1998.</td>
</tr>
<tr>
<td>Corrigan, Lisa M.</td>
<td>B.A. (University of Pittsburgh), M.A., Ph.D. (University of Maryland-College Park), Assistant Professor of Communication, 2007.</td>
</tr>
<tr>
<td>Costello, Thomas A.</td>
<td>B.S.Ag.E., M.S.Ag.E. (University of Missouri), Ph.D. (Louisiana State University), Associate Professor of Biological and Agricultural Engineering, 1986, 1992.</td>
</tr>
<tr>
<td>Costrell, Robert M.</td>
<td>B.A. (University of Michigan), Ph.D. (Harvard University), Professor of Education Reform and Economics and Endowed Chair in Education Accountability, 2006.</td>
</tr>
<tr>
<td>Cote, Robert R.</td>
<td>B.S. (Salve Regina University), M.B.A. (Golden Gate University), Visiting Assistant Professor of Operations Management, 2000.</td>
</tr>
<tr>
<td>Cothren, Jackson</td>
<td>B.S. (United States Air Force Academy), M.S., Ph.D. (Ohio State University), Associate Professor of Geography, 2004, 2010.</td>
</tr>
<tr>
<td>Courance, Paul A.</td>
<td>B.S. (University of Tennessee-Martin), M.S. (Purdue University), Ph.D. (University of Georgia), Professor of Crop, Soil, and Environmental Sciences, 1983, 2003.</td>
</tr>
<tr>
<td>Coustaut, Carmen</td>
<td>B.A. (UCLA), Ed.M. (Harvard), M.F.A. (University of South Carolina), Associate Professor of Journalism, 2005.</td>
</tr>
<tr>
<td>Couvillion, Rick J.</td>
<td>B.S.M.E. (University of Arkansas), M.S.M.E., Ph.D. (Georgia Institute of Technology), PE., Associate Professor of Mechanical Engineering, 1981, 1986.</td>
</tr>
<tr>
<td>Covington, Matthew D.</td>
<td>B.A., B.S. (University of Arkansas), Ph.D. (University of California Santa Cruz), Assistant Professor of Geology, 2012.</td>
</tr>
<tr>
<td>Cowling, Dan C.</td>
<td>B.A., M.A. (University of Arkansas), Adjunct Assistant Professor of Communication, 2002.</td>
</tr>
<tr>
<td>Cox, Brady R.</td>
<td>A.S. (College of Eastern Utah), B.S. (Utah State University), M.S. (Utah State University), Ph.D. (University of Texas), Assistant Professor Civil Engineering, 2006.</td>
</tr>
<tr>
<td>Cox, Casandra K.</td>
<td>B.S., M.S. (University of Arkansas), Instructor of Agricultural and Extension Education, 2003.</td>
</tr>
<tr>
<td>Cox, Nicole</td>
<td>B.S. (College of the Ozarks), M.B.A. (University of Arkansas), Instructor of Marketing, 2003.</td>
</tr>
</tbody>
</table>
Crandall, Mardel A. – B.S. (Kansas State University), M.S. (Purdue University), Instructor of Human Environmental Sciences, 1995.

Crandall, Philip G. – B.S. (Kansas State University), M.S., Ph.D. (Purdue University), Professor of Food Science, 1989, 1997.

Cronan, Timothy P. – B.S. (University of Southwestern Louisiana), M.S. (South Dakota State University), D.B.A. (Louisiana Tech University), Professor and the M.D. Matthews Endowed Chair in Information Systems, 1979, 1986.

Crone, John V. – B.Landscape Arch. (University of Georgia), M.Regional Planning (University of Pennsylvania), Professor of Landscape Architecture, 1980, 1991.

Crook, Damon J. – Ph.D. (University of Aberdeen), Adjunct Assistant Professor of Entomology, 2011.


Daniels, Donna – B.A., M.L.S. (Western Michigan University), Associate Professor and Associate Librarian, 1982, 1988.

Daniels, Michael B. – B.S. (Pennsylvania State University), M.S., Ph.D. (University of Arkansas), Professor of Crop, Soil, and Environmental Sciences, 1996, 2000.


Daugherty, Michael K. – B.S., M.S., Ed.D. (Oklahoma State University), Professor of Vocational Education, 2005.

Davidson, Fiona M. – B.A. (Newcastle Upon Tyne Polytechnic), M.A., Ph.D. (University of Nebraska-Lincoln), Associate Professor of Geography, 1992, 1998.

Davis, Danny J. – B.S. (Rose Polytechnic Institute), Ph.D. (Ohio State University), Professor of Chemistry and Biochemistry, 1979, 1990.

Davis, Debbie – B.A., M.Ed. (University of Central Oklahoma), Ed.D. (University of Arkansas), Clinical Assistant Professor of Curriculum and Instruction, 2008.

Davis, Fred D. – B.S. (Wayne State University), Ph.D. (Massachusetts Institute of Technology), Distinguished Professor and David D. Glass Chair in Information Systems, 1999, 2006.


Davis, Ralph K. – B.S., M.S., Ph.D. (University of Nebraska, Lincoln), Professor of Geology, 1994, 2007.


Day, Matthew – B.S. (University of Texas), Ph.D. (University of Chicago), Assistant Professor of Mathematical Sciences, 2011.


Delery, John E. – B.S. (Tulane University of Louisiana), M.S. (Memphis State University), Ph.D. (Texas A&M University), Professor and Raymond F. Orr Chair in Management, 1992, 2005.

Del Gesso, Emilio – B.A. (University of Rome), Adjunct Assistant Professor of Architecture, 1989.


Di, Jia – B.S., M.S. (Tsinghua University), Ph.D. (University of Central Florida), Associate Professor of Computer Science and Computer Engineering, 2005, 2009.

DiBrezzo, Rosalie – B.S. (Brooklyn College), M.S. (Indiana University), Ph.D. (Texas Woman’s University), University Professor of Kinesiology, 1983, 2006.

Dillard, Tom W. – B.S. (University of Central Arkansas), M.A. (University of Arkansas), Professor and Librarian, 2004.

Dingman, Shannon W. – B.S., M.S. (Pittsburg State University), M.S., Ph.D. (University of Missouri-Columbia), Assistant Professor of Mathematical Sciences, 2007.

Dittmore, Stephen W. – B.A., M.A. (Drake University), Ph.D. (University of Louisville), Assistant Professor of Recreation and Sport Management, 2008.

Dixon, Bruce L. – B.A. (University of California-Santa Barbara), M.S., Ph.D. (University of California-Davis), Professor of Agricultural Economics, 1984, 1986.


Doddridge, Benjamin – B.S. (Memphis State University), M.B.A. (Michigan State University), Visiting Assistant Professor of Operations Management, 1984.

Domínguez Barajas, Elias – B.A., M.A., Ph.D. (University of Illinois at Chicago), Associate Professor of English, 2011.


Dong, Elaine X. – B.S. (Beijing Normal University), M.S.S. (Wuhan University), M.S.S. (McGill University), Assistant Professor and Assistant Librarian, 2005.

Donoghue, Ann – B.S. (San Diego State University), M.S. (Texas A&M University), Ph.D. (F. Edward Herbert School of Medicine), Research Professor of Poultry Science, 2000.

Donoghue, Daniel – B.S. (Medical University of South Carolina), M.S. (Brigham Young University), Ph.D. (Texas A&M University), Post Doctoral Fellow (Rutgers University, Cook College), Professor of Poultry Science, 2000, 2009.

Doss, Angela – B.A., (University of Toronto), M.A., J.D. (University of Arkansas), Visiting Clinical Associate Professor of Law, 2006.


Douglas, Marlis R. – B.S., M.S., Ph.D. (University of Zurich), Associate Professor of Biological Sciences and Brinker Life Sciences Chair, 2011.

Douglas, Michael E. – B.S., M.S. (University of Louisville), Ph.D. (University of Georgia), Professor of Biological Sciences and 21st Century Chair in Global Change Biology, 2011.

Dowdle, Andrew – B.A. (University of Tennessee), M.A. (University of Iowa), Ph.D. (Miami University), Associate Professor of Political Science, 2003, 2009.

Dowle, Pearl – B.S. (Savannah State University), M.A. (Georgia Southern University), Ph.D. (Howard University), Assistant Professor of Political Science, 2008.

Dowling, Ashley P.G. – B.S. (University of Arizona), Ph.D. (University of Michigan), Assistant Professor of Entomology, 2008.


Du, Yuchun – B.S. (Shaanxi University of Technology, China), Ph.D. (Kagoshima University, Japan), Assistant Professor of Biological Sciences, 2007.

Dumond, Gregory – B.S. (University of Texas, El Paso), M.S. (Texas Tech University), Ph.D. (University of Massachusetts, Amherst), Assistant Professor of Geology, 2010.

Dunn, Karee – B.A. (University of Louisiana), M.S. (University of Memphis), Ph.D. (University of Memphis), Clinical Assistant Professor of Curriculum and Instruction, 2008.

Durdik, Jeannine M. – B.S. (Purdue University), Ph.D. (Johns Hopkins University), Professor of Biological Sciences, 1994, 2004.
Ford, Robert A. – B.A. (Principia College), M.M. (Yale University), M.F.A. (Rutgers University), M.F.A. (University of Texas, Austin), Visiting Assistant Professor of Drama, 2008, 2011.


Foster, Sharon E. – B.A. (University of California at Los Angeles), J.D. (Loyola Law School), LL.M., Ph.D. (University of Edinburgh, Scotland), Associate Professor of Law, 2000, 2009.


Fredrick, David C. – B.A., M.A. (University of Kansas), Ph.D. (University of Southern California), Associate Professor of World Languages, 1991, 1997.

Frentz, Thomas – B.S., M.S., Ph.D. (University of Wisconsin), Professor of Communication, 1985, 1995.

Freund, Joel S. – B.S., M.S., Ph.D. (Northwestern University), Associate Professor of Psychology, 1970, 1976.

Fritsch, Ingrid – B.S. (University of Utah), Ph.D. (University of Illinois-Urbana/Champaign), Professor of Chemistry and Biochemistry, 1992, 2006.

Fu, Huaxiang – B.S. (University of Science and Technology of China), M.S., Ph.D. (Fudan University), Associate Professor of Physics, 2002, 2007.

Fukushima, Tatsuya – B.A. (Kanto Gakuin University, Japan), M.A., Ph.D. (Oklahoma State University), Associate Professor of World Languages, 2001, 2007.

Funkhouser, Eric M. – B.A., M.A. (University of Nebraska), Ph.D. (Syracuse University), Associate Professor of Philosophy, 2004, 2008.

Gaber, John – B.A. (University of California, Los Angeles), M.U.P. (University of Southern California), Ph.D. (Columbia University), Professor of Political Science, 2009.

Gaber, Sharon L. – B.A. (Occidental College, Los Angeles), M.P.I. (University of Southern California), Ph.D. (Cornell University), Professor of Sociology and Criminal Justice, 2009.


Gallini, Brian – B.A. (College of the Holy Cross), J.D. (University of Michigan), Associate Professor of Law, 2008, 2011.

Ganio, Matthew – B.S., M.S. (University of Georgia), Ph.D. (University of Connecticut), Assistant Professor of Kinesiology, 2011.

Ganson, Judith A. – B.A. (Purdue University), M.S. Library Science (University of Illinois), M. Administration (University of California, Riverside), Associate Professor and Associate Librarian, 2001.


Garnier, Jerald L. – B.S. (Park College), M.S. (University of Arkansas), Visiting Assistant Professor of Operations Management, 1996.


Gattis, Carol S. – B.S.E.E., M.S.E.E., Ph.D. (University of Arkansas), Visiting Assistant Professor of Operations Management and Adjunct Associate Professor of Industrial Engineering, 2002.


Gaug, John – B.S.C., M.Sc., (Queen’s University, Canada), Ph.D. (University of North Carolina), Professor of Computer Science and Computer Engineering, 2008

Gaug, Susan – B.S.C., M.Sc., (Queen’s University, Canada), Ph.D. (University of North Carolina), Rodger S. Kline Chair and Professor of Computer Science and Computer Engineering, 2007


Hestekin, Christa N.  – B.S. (University of Kentucky), Ph.D. (Northwestern University), Assistant Professor of Chemical Engineering, 2006.

Hestekin, Jamie A.  – B.S. (University of Minnesota), Ph.D. (University of Kentucky), Associate Professor of Chemical Engineering, 2006, 2011.

Hettiarachchi, Navam S.  – B.S. (University of Madras, India), M.S. (Edinburgh University, Scotland), Ph.D. (University of Hull, England), University Professor of Food Science, 1992, 2006.

Hewitt, Paul M.  – B.A. (San Jose State College), M.A. (California State University), M.Ed. (Loyola-Marymount University), Ed.D. (University of the Pacific), Assistant Professor of Educational Leadership, 2007.

Heyes, Colin – B.S. (Loughborough University), Ph.D. (Georgia Institute of Technology), Assistant Professor of Chemistry and Biochemistry, 2008.

Heymsfield, Ernest – B.S., M.S. (Polytechnic Institute of New York), Ph.D. (City University of New York), Assistant Professor of Civil Engineering, 2001.

Higgins, Kristen – B.A. (Vanderbilt University) M.S., Ph.D. (University of Arkansas), Assistant Professor of Counselor Education, 2006.

Hilsenroth, Mark J. – B.A. (University of Akron), Ph.D. (University of Tennessee), Assistant Professor of Psychology, 1996.

Hinton, James F. – B.S. (University of Alabama), M.S., Ph.D. (University of Georgia), University Professor of Chemistry and Biochemistry, 1965, 1989.

Hinrichsen, Lisa – B.A. (Wellesley College), M.A., Ph.D. (Boston University), Assistant Professor of English, 2008.


Hipple, William J. – B.S. (U.S. Naval Academy), M.S. (George Washington University), Ph.D. (University of Texas), Visiting Assistant Professor of Operations Management, 1995.


Hofer, Adrianna Rossiter – B.S. (Federal University of Pernambuco, Brazil), M.S. (Federal University of Rio de Janeiro, Brazil), Ph.D. (University of Maryland), Assistant Professor of Supply Chain Management, 2008.

Hofer, Christian – B.A. (European School of Business), Ph.D. (University of Maryland), Associate Professor of Supply Chain Management, 2007, 2012.


Holyfield, Lori – B.S.E., M.A. (University of Arkansas), Ph.D. (University of Georgia), Professor of Sociology and Criminal Justice, 1995, 2012.

Hopkins, John D. – B.S., M.S. (Clemson), Ph.D. (University of Arkansas), Associate Professor of Entomology, 2002, 2011.

Horowitz, Andrew – B.S. (University of Maryland), M.S., Ph.D. (University of Wisconsin), Professor of Economics, 1997, 2006.


Howell, Terry A. – B.S.Ag.E. (Texas A&M University), Ph.D. (University of Wisconsin), Adjunct Assistant Professor of Biological and Agricultural Engineering, 2002.


Hoyer, Jennifer – B.A. (Tulsa University), M.A., Ph.D. (University of Minnesota), Assistant Professor of World Languages, 2007.

Huang, Miaqing – B.S. (Fudan University), Ph.D. (George Washington University), Assistant Professor of Computer Science and Computer Engineering, 2010.

Huang, Po-Hao Adam – B.S., M.S., Ph.D. (University of California at Los Angeles), Associate Professor of Mechanical Engineering, 2006, 2011.

Huang, Shawn – B.S (Ginan University, China), M.S. (University of Florida), Ph.D. (University of Missouri), Assistant Professor of Accounting, 2009.

Huff, Geraldine – B.S., M.S., Ph.D. (University of Arkansas), Research Assistant Professor of Poultry Science, 1994, 1998.


Huggins, Denise W. – B.A., M.A., Ph.D. (Texas Woman’s University), Assistant Professor of Sociology and Criminal Justice, 2001.


Hughes, D’Iorah – B.A. (California State University-Long Beach), B.S. (University of Kentucky), J.D. (Duke University), Associate Professor of Law, 2008, 2011.

Hughes, Jean S. – B.S. (University of Central Arkansas), M.Ed., Ed.D. (University of Arkansas), Assistant Professor of Recreation, 2000.


Hunt, Sharon – B.S.E., M.Ed. (University of Arkansas), Ed.D. (University of Georgia), Professor of Recreation and Sport Management, 1990, 1992.

Hunt, Valerie H. – B.A., J.D., Ph.D. (University of Arkansas), Research Assistant Professor of Public Policy, Adjunct Assistant Professor of Political Science, 2005, 2010.

Hunter, Amy M. – B.S. (Missouri State University), M.S. (East Tennessee State University), Au.D. (Salus University), Clinical Assistant Professor of Audiology, 2011.

Hurd, Debra – B.A. (University of Arkansas), M.P.A. (University of Arkansas), Ph.D. (University of Arkansas), Research Associate Professor of Social Work, 2004.

Hurd, Fred Coy – B.S. (Arkansas State University), M.S., Ph.D. (University of Arkansas), Visiting Assistant Professor of Operations Management, 2002.

Hyatt, David G. – B.S., M.B.A. (University of Arkansas), D.M. (Case Western University), Clinical Assistant Professor of Supply Chain Management, 2011.

Imbeau, Marcia B. – B.A. (Hendrix College), M.Ed. (University of Arkansas at Little Rock), Ph.D. (University of Connecticut), Associate Professor of Special Education, 1991, 1997.

Ingels, Neil B. Jr. – B.S.E.E. (University of Arkansas), M.S.E.E. (University of Santa Clara, California), Ph.D. (Stanford University, California), Adjunct Professor of Biological and Agricultural Engineering, 2003.

Ito, Shoichi – B.S. (Miyazaki University), M.S. (University of Arkansas), Ph.D. (Texas A&M University), Adjunct Professor of Agricultural Economics and Agribusiness, 2004.

Ivey, D. Mack – B.S., Ph.D. (University of Georgia), Associate Professor of Biological Sciences, 1992, 1998.

Jack, Nancy E. – B.S. (Tarleton State University), M.S., Ph.D. (New Mexico State University), Associate Professor of Animal Science, 2000, 2010.

Jackson, James R. – B.A. (Southern Methodist University), J.D. (University of Arkansas), M.L.L.S. (University of Oklahoma), Associate Librarian, Law, 1996.

Jackson, Thomas L. – B.A. (University of the Pacific), M.A., Ph.D. (Bowling Green State University), Professor of Psychology, 1988, 1991.


Jahedi, Salar – B.S. (University of Chicago), Ph.D. (University of California, Berkeley), Assistant Professor of Economics, 2009.

James, Douglas A. – B.S., M.S. (University of Michigan), Ph.D. (University of Illinois), University Professor of Biological Sciences, 1953, 2004.

Jandik, Tomas – B.S., M.S. (Czech Technical University), Ph.D. (University of Pittsburgh), Associate Professor of Finance, 2000, 2006.

Jarret, Anna – B.S.N. (Missouri Southern State College), M.S.N., Ph.D. (University of Missouri), Assistant Professor of Nursing, 2011.

Jennings, John A. – B.S. (Southwest Missouri State University), M.S. (University of Arkansas), Ph.D. (University of Missouri), Professor of Animal Science and Extension Livestock Specialist, 1998.

Jensen, Molly – B.S. (Southwest Missouri State University), M.A., Ph.D. (University of Arkansas), Clinical Associate Professor of Marketing, 2003, 2011.


Jia, Yulin – B.S. (Xichang Agriculture College), M.S. (University of Florida), Ph.D. (Purdue University), Adjunct Associate Professor of Plant Pathology, 2002.
Jimeno, Rafael – B.A. (Washington State University), Ph.D. (Arizona State University), Assistant Professor of Political Science and Diane D. Blair Professor of Latino Studies, 2010.


Jin, Sha – B.S. (East China University of Science and Technology), Ph.D. (Kyushu Institute of Technology, Japan), Assistant Professor of Biomedical Engineering, 2009.

Johnson, Charlene – B.A., M.Ed. (University of Cincinnati), M.B.A. (Atlanta University), Ph.D. (Emory University), Associate Professor of Middle Level Education, 1992, 1998.

Johnson, Donald M. – B.S., M.A.E. (Western Kentucky University), M.S., Ph.D. (University of Missouri), Professor of Agricultural and Extension Education, 1993, 1999.

Johnson, Donn T. – B.S. (University of Minnesota), M.S., Ph.D. (Michigan State University), Professor of Entomology, 1979, 1993.


Johnson, Mark R. – B.S. (Brooklyn College), M.S. (Purdue University), Ph.D. (Michigan State University), Associate Professor of Mathematical Sciences, 1995, 2001.

Johnson, Normastel – B.A. (Vanderbilt University), M.L.S. (Simmons College), Associate Professor and Associate Librarian, 1989, 1995.


Jolliffe, David – B.A. (Bethany College), M.A. (West Virginia University), Ph.D. (University of Texas at Austin), Professor of English and Brown Chair in English, and Professor of Curriculum and Instruction, 2005.


Jones, Chester S. – B.S.E. (Pittsburg State University), Ph.D. (University of Alabama at Birmingham), Professor of Community Health Promotion, 1994, 2006.

Jones, Eddie Wade – B.A. (Tougaloo College), M.M. (Miami University), D.M.A. (Memphis State University), Associate Professor of Music, 1990.


Jones, Linda C. – B.A. (Northeast Louisiana University), M.A. (University of Arkansas), M.A. (University of Arkansas), Associate Professor of World Languages, 2000, 2005.

Jones, Phillip J. – B.A. (University of California, Santa Barbara), M.A. (University of California, Irvine), M.S. (University of Illinois), Associate Professor and Associate Librarian, 2003.

Jones, Steven – B.S. (Northwestern State University), M.S. (Louisiana Tech University), Associate Professor of Animal Science, 2005.


Jong, Ing-Chang – B.S.C.E. (National Taiwan University), M.S.C.E. (South Dakota School of Mines and Technology), Ph.D. (Northwestern University), P.E., Professor of Mechanical Engineering, 1965, 1974.

Jordan, Elizabeth A. – B.S. (Lincoln University), M.A.T. (Webster University), M.S. (University of Missouri, Kansas City), Instructor of Special Education, 1996.

Jordan, Gerald B. – B.A. (University of Arkansas), M.S.J. (Northwestern University), Associate Professor of Journalism, 1995.

Jozkowski, Kristen – B.S. (Pennsylvania State University), M.S., Ph.D. (Indiana University), Assistant Professor of Community Health Promotion, 2011.

Judges, Donald P. – B.A. (Johns Hopkins University), J.D. (University of Maryland), Ph.D. (University of Tulsa), E.J. Ball Professor of Law, 1989, 2005.


Kahng, Er-Gene – B.A. (University of California, Los Angeles), M.M., Artist Diploma (Yale University School of Music), Assistant Professor of Music, 2007.


Kelley, Christopher R. – B.A. (Louisiana State University), J.D. (Howard University), LL.M. (University of Arkansas), Associate Professor of Law, 1998, 2002.


Kelley, Jason – B.S. (Kansas State University), M.S., Ph.D. (Oklahoma State University), Associate Professor of Crop, Soil, and Environmental Sciences, 2003, 2009.

Keltin, Katie – B.S.B.A., M.S. (University of Florida), Ph.D. (Indiana University), Assistant Professor of Marketing, 2011.

Kennefick, Daniel – B.S. (University College Cork, Ireland), M.S., Ph.D. (California Institute of Technology), Assistant Professor of Physics, 2003, 2009.

Kennefick, Julia – B.S. (University of Arkansas), Ph.D. (California Institute of Technology), Assistant Professor of Physics, 2003, 2009.

Kent, Laura B. – B.S., M.S. (Purdue University), Ph.D. (University of Wisconsin), Associate Professor of Curriculum and Instruction, 2006.

Kern, Jack C. – B.S. (University of Wisconsin-LaCrosse), M.Ed. (Southwest Texas State University), Ph.D. (Texas Woman's University), Clinical Associate Professor of Kinesiology, 1996, 2002.


Kerr, John B. III – B.A. (University of Texas), Ph.D. (Texas A&M University), Professor of Political Science, 1994, 2007.

Keskesi, Sami – B.S. (Bogazici University), M.S. (Fatih University), Ph.D. (Texas A&M University), Assistant Professor of Accounting, 2011.

Kidd, Michael T. – B.S., M.S. (University of Arkansas), Ph.D. (North Carolina State University), Professor of Poultry Science, 2010.


Killenbeck, Mark R. – A.B. (Boston College), J.D., Ph.D. (University of Nebraska), Wylie H. Davis Distinguished Professor of Law, 1988, 2003.

Killian, Timothy S. – B.A. (Central Bible College), M.A. (Wheaton College), Ph.D. (University of Missouri, Columbia), Associate Professor of Human Environmental Sciences, 2001, 2008.

Kim, Jin-Woo – B.S. (Technology, Seoul National University), B.S. (University of Iowa), M.S. (University of Wisconsin), Ph.D. (Texas A&M University), Professor of Biological and Agricultural Engineering, 2001, 2011.


Kirkpatrick, Dennis – B.A. (University of Arkansas), M.A. (University of Southern California), Assistant Professor of Journalism, 2010.

Kirkpatrick, Terrence L. – B.S.A., M.S. (University of Arkansas), Ph.D. (North Carolina State University), Professor of Plant Pathology, 1984, 1997.

Kirkwood, Patricia E. – B.S. (Pacific Lutheran University), M.L.S. (University of Illinois, Urbana-Champaign), Associate Professor and Associate Librarian, 2004.
Kish-Gephart, Jennifer – B.S., M.B.A. (Drexel University), Ph.D. (Pennsylvania State University), Assistant Professor of Management, 2010.


Knierim, Katherine – B.S. (Bowling Green State University), M.S. (University of Arkansas), Instructor of Geology, 2011.


Koch, Lynn – B.S., M.S. (University of Arizona), Ph.D. (University of Wisconsin-Madison), Professor of Rehabilitation Education and Research, 2006, 2010.

Koeppe, Roger E. – A.B. (Haverford College), Ph.D. (California Institute of Technology), University Professor of Chemistry and Biochemistry, 1979, 1996.

Koh, E. – B.A. (Seoul National University), M.S.W., Ph.D. (University of Illinois at Urbana-Champaign), Assistant Professor of Social Work, 2010.

Kong, Byung Whi – B.S. (Korea University), M.S., Ph.D. (University of Minnesota), Associate Professor of Poultry Science, 2006.

Kopp, Steven W. – B.S. (University of Missouri-Rolla), M.B.A. (University of Southern Mississippi), Ph.D. (Michigan State University), Associate Professor of Marketing, 1992, 2000.

Korth, Kenneth L. – B.S. (University of Nebraska), Ph.D. (North Carolina State University), Professor of Plant Pathology, 1999, 2009.


Kral, Timothy A. – B.S. (John Carroll University), Ph.D. (University of Florida), Professor of Biological Sciences, 1981, 2008.


Kreider, David L. – B.S.A. (University of Arkansas), M.S. (Oklahoma State University), Ph.D. (University of Arkansas), Associate Professor of Animal Science, 1986, 1991.

Kring, Timothy J. – B.A. (Quinnipiac College), M.S., Ph.D. (Texas A&M University), Professor of Entomology, 1985, 1994.

Kuenzel, Wayne – B.S., M.S. (Bucknell University), Ph.D. (University of Georgia), Professor of Poultry Science, 1999.

Kulczak, Deborah E. – B.A., M.L.S. (Kent State University), Associate Professor and Associate Librarian, 1988, 2000.

Kumar, Thallapuranam K. Suresh – B.S., M.S., Ph.D. (Osmania University), Associate Professor of Chemistry and Biochemistry, 2006, 2010.


Kwon, Young Min – B.S., M.S. (Seoul National University), Ph.D. (Texas A&M University), Associate Professor of Poultry Science, 2002, 2008.

Lacy, Claud H. – B.S., M.S. (University of Oklahoma), Ph.D. (University of Texas, Austin), Professor of Physics, 1980, 1999.

Lamphere, Billy D. – B.A. (Northeastern Oklahoma State University), M.S. (Kennedy-Western University), Visiting Assistant Professor of Operations Management, 2002.


Landman, Michael – B.A. (Binghamton University), M.F.A. (Columbia University), Associate Professor of Drama, 2004, 2011.

Langager, Graeme – B.M. (Capilano College, British Columbia), M.M. (California State University, Long Beach), D.M.A. (University of Cincinnati), Assistant Professor of Music, 2003, 2005.

Langner, Steve – B.S. (Springfield College), M.S. (University of Baltimore), Re.D. (Indiana University), Associate Professor of Recreation and Sport Management, 1989, 1995.

Lanzani, Loredana – B.S. (University of Rome II), Ph.D. (Purdue University), Professor of Mathematical Sciences, 1997, 2008.


Larson, Karla S. – B.S. (Bethel University), M.S. (University of Minnesota), Ph.D. (Capella University), Assistant Professor of Nursing, 2011.

Lee, Peggy – B.S.N. (Mississippi College), M.S. (University of Southern Mississippi), Clinical Instructor of Nursing, 2009.

Lee, Richard N. – B.A. (Luther College), Ph.D. (Stanford University), Associate Professor of Philosophy, 1982, 1988.

Lee, Sun-Ok – B.S. (Dongduck Women's University), M.S. (Dongduck Women's University), M.S. (Iowa State University), Ph.D. (Iowa State University), Associate Professor of Food Science, 2008.

Lee, Wayne Y. – B.S.M.E. (De La Salle College, Philippines), M.B.A. (Santa Clara University), Ph.D. (University of California, Los Angeles), Professor of Finance, the Alice L. Walton Chair in Finance, and the Garrison Chair in Finance, 1998.

Leeds, Stacy L. – B.A. (Washington University in St. Louis), M.B.A (University of Tennessee), J.D. (University of Tulsa), LL.M. (University of Wisconsin), Professor of Law, 2011.

Leen-Feldner, Ellen W. – B.A. (University of Notre Dame), M.S. (West Virginia University), Ph.D. (University of Vermont), Assistant Professor of Psychology, 2005.


Lehmann, Michael – Diploma in Biology, Ph.D. (Philippi University of Marburg, Germany), Associate Professor of Biological Sciences, 2002.


Lessner, Daniel J. – B.S. (University of Wisconsin-Stevens Point), Ph.D. (University of Iowa), Assistant Professor of Biological Sciences, 2008.

Levine, Daniel – B.A. (University of Minnesota), Ph.D. (University of Cincinnati), Professor of World Languages (Classical Studies), 1980, 1998.


Leylek, James H. – B.S., M.S., Ph.D. (University of Illinois), Professor of Mechanical Engineering and Twenty-First Century Leadership Chair in Engineering, 1976, 1984.

Li, Jiali – B.S. (Hei Long Jiang University), M.S. (University of Science & Technology of China), M.S., Ph.D. (City University of New York), Associate Professor, 2008.

Li, Wing Ning – B.S. (University of Iowa), M.S., Ph.D. (University of Minnesota), Professor of Computer Science and Computer Engineering, 1989, 2007.

Li, Yanbin – B.S. (Shenyang Agricultural University, China), M.S.Ag.E. (University of Nebraska), Ph.D. (Pennsylvania State University), Professor of Biological and Agricultural Engineering, 1994, 2003; Professor of Poultry Science, 1999, 2003.

Liang, Yi – B.S., M.S. (China Agricultural University, Beijing, China), Ph.D. (University of Alberta, Canada), Assistant Professor of Biological and Agricultural Engineering, 2007.

Lickwar, Phoebe – B.A., M.Ed. (Harvard), M.A. (Rhode Island School of Design), Assistant Professor of Landscape Architecture, 2012.

Limp, W. Fredrick – B.A., M.A., Ph.D. (Indiana University), Leica Geosystems Chair and University Professor of Anthropology, Geosciences and Environmental Dynamics, 1979, 2002.

Lincoln, Felica – B.S., M.Ed. (Arkansas Tech University), Ph.D. (University of Pennsylvania), Associate Professor in English as a Second Language, 2000, 2009.


Linton, Richard H. – B.S., M.S., Ph.D. (Virginia Polytechnic Institute and State University), Adjunct Assistant Professor of Poultry Science, 2011.
Lirgg, Cathy D. – B.A. (Muskingum College), M.S. (Indiana State University), Ph.D. (Michigan State University), Associate Professor of Kinesiology, 1991, 1996.


Lo, Wen Jou – B.S. (Soochow University), M.A., Ph.D. (Arizona State University), Assistant Professor of Educational Statistics, 2008.

Loewer, Otto J. – B.S., M.S. (Louisiana State University), M.S. (Michigan State University), Ph.D. (Purdue University), Professor of Biological and Agricultural Engineering, 1985-1992, 1996.

Loftin, Kelly M. – B.S. (Arkansas Tech), M.S. (University of Arkansas), Ph.D. (New Mexico State University), Associate Professor of Entomology, 2002, 2010.

Lohr, Jeffrey M. – B.S. (University of Wisconsin), M.A., Ph.D. (University of Hawaii), Professor of Psychology, 1975, 1992.

Longer, David E. – B.S. (Ball State University), M.S., Ph.D. (Purdue University), Professor of Crop, Soil, and Environmental Sciences, 1979, 2005.

Looper, Michael L. – B.S., M.S. (University of Arkansas), Ph.D. (Oklahoma State University), Professor of Animal Science, 2002, 2011.

Lorence, Argelia – Ph.D. (Universidad Nacional Autonoma de Mexico), Adjunct Assistant Professor of Entomology, 2009.

Loos, Michael D. – B.A. (Parsons College), M.Ed. (Springfield College), Ph.D. (University of Arkansas), Clinical Assistant Professor of Counselor Education, 2011.

Lorenz, Gus M. – B.S.A., M.S., Ph.D. (University of Arkansas), Professor of Entomology, 1997.


Lucas, Christopher J. – B.A. (Syracuse University), M.A. (Northwestern University), Ph.D. (Ohio State University), Professor of Educational Leadership, Counseling, and Foundations, 1993.


Luoni, Stephen D. – B.S.Arch. (Ohio State University), M.Arch. (Yale University), Distinguished Professor of Architecture, 2003, 2011.

Lyles, Ivory W. – B.S. (Alcorn State University), M.S. (Mississippi State University), Ph.D. (Ohio State University), Adjunct Professor of Agricultural and Extension Education, 2001.


Madison, Bernard L. – B.S. (Western Kentucky University), M.S., Ph.D. (University of Kentucky), Professor of Mathematical Sciences, 1979.

Mahalka, Matthew – B.M.E. (University of Central Missouri), M.A. (University of Minnesota), Instructor, 2011.


Maki, Gregory E. – B.S.M.E., M.S. (Georgia Institute of Technology), Ph.D. (University of Mississippi), Visiting Assistant Professor of Operations Management, 1988.

Malakhov, Alexey – M.S. (Moscow State University), Ph.D. (University of North Carolina), Ph.D. (Northwestern University), Assistant Professor of Finance, 2006.

Malm, Teri – B.S.N. (University of Arkansas), M.S.N. (University of Arkansas for Medical Sciences), Clinical Instructor of Nursing, 2005.


Mamiseishvili, Ketevan – B.A. (Kutaisi State University), M.A., Ph.D. (University of Missouri), Assistant Professor of Higher Education, 2008.


Mantooth, H. Alan – B.S., M.S. (University of Arkansas), Ph.D. (Georgia Institute of Technology), Twenty-First Century Chair in Mixed-Signal IC Design and CAD and Distinguished Professor of Electrical Engineering, 1998, 2011.

Maranto, Robert A. – B.S. (Maryland), Ph.D. (Minnesota), Professor of Education Reform and Endowed Chair in Leadership, 2008.


Margulis, Jura – B.M. (Musikhochschule Freiburg, Germany), Graduate Performance Diploma (Peabody Conservatory of Music, Johns Hopkins University), Professor of Music, 1999, 2010.

Markham, Elizabeth J. – B.A. (University of Otago, New Zealand), Ph.D. (Cambridge University), Research Professor of History, 2000.


Martin, Patricia Jean – B.A. (Rollins College), M.F.A. (Purdue University), Professor of Drama, 1995, 2008.


Mason, Esten R. – B.S., Ph.D. (Texas A&M University), Assistant Professor of Crop, Science, and Environmental Sciences, 2010.

Mathur, Gyanesh N. – B.S. (BHU Varansai, India), M.S. (University of Windsor, Canada), Ph.D. (University of Detroit), Research Professor in Electrical Engineering, 2007.

Matlock, Marty D. – B.S., M.S., Ph.D. (Oklahoma State University), Professor of Biological and Agricultural Engineering, 2001, 2009.

Matthews, Mary E. – B.S.E., J.D. (University of Arkansas), Sidney Parker Davis Jr. Professor of Business and Commercial Law, 1986, 2005.

Mattice, John D. – B.A. (Grinnell College), Ph.D. (University of Arkansas), Research Associate Professor of Crop, Soil, and Environmental Sciences, 1989, 2003.


Mauroumoustakos, Andy – B.S. (Oral Roberts University), M.S., Ph.D. (Oklahoma State University), Professor of Crop, Soil, and Environmental Sciences, 1989, 2002.

Maxwell, Angi – B.A. (University of Arkansas), M.A., Ph.D. (University of Texas, Austin), Assistant Professor of Political Science and Diane D. Blair Professor of Southern Studies, 2010.

Maxwell, Charles – B.S., M.S., (University of Georgia), Ph.D. (University of Wisconsin), Professor of Animal Science, 1996.

Mayes, Richard – B.S. (University of Arkansas), Major (U.S. Army Corps of Engineers), Assistant Professor of Military Science and Leadership, 2004.

Mayes, Susan – B.S.E., M.Ed. (University of Arkansas), Instructor in Kinesiology, 1982.


Mazow, Leo – (University of Denver), M.A. (University of Colorado, Boulder), Ph.D. (University of North Carolina, Chapel Hill), Associate Professor of Art, 2010.


McCartney, Nancy G. – B.A., M.A., Ph.D. (University of Wisconsin), Assistant Professor and Assistant Curator, 1974, 1976.

McComas, William F. – B.S. (Lock Haven State University), M.A. (West Chester State University), Ph.D. (University of Iowa), Professor of Curriculum and Instruction, 2006.

McDonald, Garry – B.S., M.S. Ph.D. (Texas A&M University), Assistant Professor of Horticulture, 2008.
McGehee, Marilyn – B.S.E., M.S. (University of Arkansas), Instructor in Communication Disorders, 1999.
McIntosh, Matthias C. – B.A. (Virginia Tech); Ph.D. (Pennsylvania State University), Professor of Chemistry and Biochemistry, 1996, 2011.
McLeod, Paul J. – B.S., M.S., Ph.D. (University of Arkansas), Professor of Entomology, 1984, 1993.
McMullin, Irene – B.A., M.A. (University of Toronto), Ph.D. (Rice University), Assistant Professor of Philosophy, 2007.
McNabb, David – B.S. (University of Texas at Arlington), Ph.D. (Louisiana State University Medical Center), Associate Professor of Biological Sciences, 2000, 2006.
Meaux, Laurie M. – B.S., M.S., Ph.D. (University of Southwestern Louisiana), Associate Professor of Mathematical Sciences, 1989, 1995.
Meek, James L. – B.A., M.A., Ph.D. (University of Texas), Associate Professor of Mathematical Sciences, 1967, 1974.
Meller, Russell D. – B.S.E., M.S.E., Ph.D. (University of Michigan), Professor of Industrial Engineering and the James M. Heffley and Marie G. Heffley Professor of Logistics and Entrepreneurship, 2005.
Messadi, Tahar – B.Arch. (Universite de Constantine, Algeria), M.Arch., Ph.D. (University of Michigan, Ann Arbor), Associate Professor of Architecture, 2003, 2009.
Meuillenet, Jean-Francois – B.S. (Superior Special Math Preparatory School, Remins, France), M.S. (National Superior School of Agronomy and Food Science, Nancy, France), Ph.D. (University of Georgia), Professor of Food Science and Food Sensory Science Professorship, 1996, 2008.
Milburn, Ashlea R. Bennett – B.S. (University of Arkansas), M.S. (Virginia Tech), Ph.D. (Georgia Tech), Assistant Professor of Industrial Engineering, 2010.
Miles, Jennifer M. – B.S. (Florida State University), M.A., Ed.D. (University of Alabama), Assistant Professor of Higher Education, 2006.
Miles, Rebecca – B.S. (Oklahoma Christian College), M.Ed. (Central State University), Ph.D. (Oklahoma State University), Instructor of Management, 2011.
Miller, David M. – B.S., M.S. (Purdue University), Ph.D. (University of Georgia), Professor of Crop, Soil, and Environmental Sciences, 1988, 2001.
Miller, Debra L. – B.A. (University of Arkansas), M.S.L.S. (University of Kentucky), Adjunct Assistant Professor and Adjunct Assistant Librarian, 1999.
Miller, Jefferson D. – B.A. (Northeastern State University, Oklahoma), M.A., Ph.D. (Oklahoma State University), Associate Professor of Agricultural and Extension Education, 2001, 2006.
Miller, Michael – B.S. (University of Missouri, Rolla), M.S. (University of Colorado), Visiting Assistant Professor of Operations Management, 2001.
Miller, Nancy G. – B.A., B.S. (Iowa State University), M.S., Ph.D. (University of Minnesota), Assistant Professor of Interior Design, 2002.
Muntz, Charles – B.A. (Swarthmore College), M.A., Ph.D. (Duke University), Visiting Assistant Professor of History, 2008.
Muralidhara, H.S. – B.S., M.S. (University of Bangalore, India), M.T. (University of Nagpur, India), M.S. (Southern Illinois University), Ph.D. (West Virginia University), Adjunct Professor of Chemical Engineering, 2002.
Murphy, J. Bradford – B.S. (Colorado State University), M.Phil., M.S., Ph.D. (Yale University), Professor of Horticulture, 1976, 1993.
Murray, Jeff B. – B.A. (University of Northern Colorado), Ph.D. (Virginia Polytechnic Institute and State University), Professor of Marketing and R.A. and Vivian Young Chair, 1989, 2004.
Myers, James N. – B.S.B.A. (University of Arizona), Ph.D. (University of Michigan), Professor and Ralph L. McQueen Chair in Accounting, 2008.
Nachtmann, Heather – B.S.I.E., M.S.I.E., Ph.D. (University of Pittsburgh), Associate Professor of Industrial Engineering, 2000, 2005.
Nalley, L. Lanier – B.S. (Ohio State University), M.S. (Mississippi State University), Ph.D. (Kansas State University), Assistant Professor of Agricultural Economics and Agribusiness, 2008.
Nayga, Rodolfo M. Jr. – Ph.D. (Texas A&M University), Professor of Agricultural Economics and Agribusiness, 2009.
Nedbal, Martin – B.A. (Hamilton College), M.M. (Syracuse University), Ph.D. (Eastman School of Music, University of Rochester), Assistant Professor of Music, 2009.
Neighbors, Marianne – B.S.N. (Mankato State University), M.Ed. (University of Arkansas), M.S. (University of Oklahoma), Ed.D. (University of Arkansas), Professor of Nursing, 1972, 1995.
Nolan, Justin M. – B.A. (Westminster College), M.A., Ph.D. (University of Missouri-Columbia), Associate Professor of Anthropology, 2000, 2010.
Noland, Billy R. – B.B.A. (Midwestern University), M.B.A. (University of Central Arkansas), Visiting Assistant Professor of Operations Management, 1981.
Norman, Richard J. – B.S., M.S. (University of Missouri), Ph.D. (University of Illinois), Professor of Crop, Soil, and Environmental Sciences, 1983, 1992.
Norsworthy, Jason – B.S. (Louisiana Tech University), M.S., Ph.D. (University of Arkansas), Professor of Crop, Soil, and Environmental Sciences, 2006, 2011.
Norvell, Phillip E. – B.A., J.D. (University of Oklahoma), Professor of Law, 1975, 1983.
Nutt, Timothy G. – B.A. (University of Central Arkansas), M.L.I.S. (University of Oklahoma), Assistant Professor and Assistant Librarian, 2004.
Nutter, Darin W. – B.S.M.E., M.S.M.E. (Oklahoma State University), Ph.D. (Texas A&M University), PE., Professor of Mechanical Engineering, 1994, 2011.
O’Brien, Doug – B.A. (Loras College), J.D. (University of Iowa), LL.M. (University of Arkansas), Research Assistant Professor of Law, 2004.
Odel, Ellen – B.S.N. (University of Missouri), M.S.N. (George Mason University), D.N.P. (Case Western Reserve University), Assistant Professor of Nursing, 2006, 2008.
Oelke, Kim – B.S.N. (University of Arkansas for Medical Sciences), M.S.N. (University of Arkansas), Clinical Instructor of Nursing, 2012.
Ogbeide, Godwin-Charles – B.S. (Lincoln University), B.S. (University of Missouri-Columbia), M.B.A. (Columbia College), M.S. (University of Missouri-Columbia), Ph.D. (University of Missouri-Columbia), Assistant Professor of Human Environmental Sciences, 2007.
Oliver, Gretchen D. – B.S.E., M.S. (University of Arkansas), Ph.D. (Texas Woman’s University), Assistant Professor of Kinesiology, 2006, 2008.
Oliver, William F. III – B.S. (University of Arizona), M.S., Ph.D. (University of Colorado), Associate Professor of Physics, 1992, 1998.
O’Neal, Thomas – B.A. (Rutgers University), M.H.A. (Virginia Commonwealth University), Visiting Assistant Professor of Operations Management, 2002.
Oosterhuis, Derrick M. – B.S. (Natal University), M.S. (Reading University), Ph.D. (Utah State University), Distinguished Professor of Crop, Soil, and Environmental Sciences, and Clyde H. Sites Endowed Professorship in International Crop Physiology, 1985, 1998.
Osborn, G. Scott – B.S., M.S., Ag.E (University of Kentucky), Ph.D. (North Carolina State University), Associate Professor of Biological Engineering, 2001, 2007.
Osborn, Tommy – B.S. (Arkansas State University), Major (Field Artillery, U.S. Army), Assistant Professor of Military Science and Leadership, 2001.
Osborne, Carla – B.A. (Transylvania University), M.S.N. (Vanderbilt University), M.S., S.D. (Harvard University), Assistant Professor of Nursing, 2010.
Overbey, Randle – B.S. (Arkansas State University), Ph.D. (University of Arkansas), Instructor in Electrical Engineering, 2008.
Owens-Hanning, Casey M. – B.S., M.S., Ph.D. (Texas A&M University), Associate Professor of Poultry Science, 2000, 2006.
Ozment, John D. – B.S.B.A., M.B.A. (University of Tulsa), Ph.D. (University of Minnesota), Professor of Marketing and the Oren Harris Chair in Transportation, 1986, 1996.
Pappas, Alexandra – B.A. (University of Oregon), M.A., Ph.D. (University of Wisconsin, Madison), Associate Professor of World Languages, 2006, 2012.
Park, Sung Choon – B.A., M.A. (Seoul National University), M.A. Ph.D. (Ohio State University), Assistant Professor of Curriculum and Instruction, 2008.
Parker, Marie A. – B.S. (University of Arkansas, Pine Bluff), M.S. (Ouachita Baptist University), Instructor in Curriculum and Instruction, 1995.

Parker-Gibson, Necia – B.S.A. (University of Arkansas), M.L.I.S. (Louisiana State University), Associate Professor and Associate Librarian, 1991, 1997.


Parks, Nathan A. – B.A. (University of Virginia), M.S., Ph.D. (Georgia Institute of Technology), Assistant Professor of Psychology, 2012.


Patterson, Susan – B.S.N., M.H.S.A. (University of Arkansas for Medical Sciences), Clinical Instructor of Nursing, 2010.

Paul, David W. – B.S. (Southwestern University), Ph.D. (University of Cincinnati), Associate Professor of Chemistry and Biochemistry, 1980, 1986.

Paulk, Jennifer – B.S. (Mississippi State University), M.S., Ph.D. (University of Arkansas), Assistant Professor of Mathematics Education, 2011.

Paulus, David – B.S., M.S. (University of Tennessee), Ph.D (Colorado State University), Adjunct Assistant Professor, Mechanical Engineering, 2007.

Pederson, Donald O. – B.S. (Texas Technological College), Ph.D. (Rice University), Professor of Physics, 1972, 1984.

Penner-Williams, Janet – B.S.E., M.Ed, Ed.D (University of Houston), Clinical Associate Professor of Curriculum and Instruction, 2005, 2010.

Pennie, W. Roy – B.S.M.E., M.S.M.E. (University of Arkansas), Ph.D. (Oklahoma State University), PE, Professor of Chemical Engineering, 1989.

Peer, Andy – B.Sc.Ag. (Govind Ballabh Pant University of Agriculture and Technology, India), M.S. (Indian Agricultural Research Institute, India), Ph.D. (Iowa State University), Professor of Crop, Soil, and Environmental Sciences, 2011.

Perez, Santiago R. – B.Arch. (Boston Architectural Center), M.Arch. (Harvard University Graduate School of Design), Assistant Professor of Architecture, 2010.

Peters, Gary – B.S. (Arkansas Tech University), M.S. (University of Missouri - Columbia), Ph.D. (University of Oregon), Professor and Doris M. Cook Chair in Accounting, 2003, 2012.

Petretic, Patricia A. – B.A. (Youngstown State University), M.A., Ph.D. (Bowling Green State University), Associate Professor of Psychology, 1991.

Petris, Giovanni – B.S. (Università degli Studi di Milano, Italy), M.S., Ph.D. (Duke University), Associate Professor of Mathematical Sciences, 1999, 2005.


Pfalzgraf, Kelley – D.V.M. (Iowa State University), Adjunct Professor of Animal Science, 2011.

Philipp, Dirk – Dipl.-Ing.Agr. (University of Leizig, Germany), Ph.D. (Texas Tech University), Assistant Professor of Animal Science, 2007.

Pierce, Benjamin – B.M. (Bowling Green State University), M.M., DMA. (University of Michigan), Assistant Professor of Music, 2003, 2005.

Pierce, Michael C. – A.B. (Kenyon College), M.A., Ph.D. (Ohio State University), Associate Professor of History, 2006, 2011.

Pijanowski, John C. – B.A. (Brown University), M.S., Ph.D. (Cornell University), Associate Professor of Educational Administration, 2007, 2011.

Pincus, Karen V. – B.S., M.B.A. (University of Maryland), C.P.A., Professor and Doyle Z. and Maynette Derr Williams Chair in Professional Accounting, 1995.

Pinto, Ines – B.S., M.S. (University of Chile), Ph.D. (Louisiana State University Medical Center), Associate Professor of Biological Sciences, 2000, 2006.

Pittman, Harrison – B.A., J.D. (University of Arkansas at Little Rock), LL.M. (University of Arkansas), Research Assistant Professor of Agricultural Economics and Agribusiness, 2004.

Plafcan, Frank T. – B.S.A., M.S. (University of Arkansas), Ed.D. (Oklahoma State University), Adjunct Assistant Professor of Agricultural and Extension Education, 1993.


Poil, Edward A. – B.S.E.E. (Boston University), M.S.E.M. (University of Dayton), M.S.S.E. (Air Force Institute of Technology), M.S.R.E., Ph.D. (University of Arizona), Associate Professor of Industrial Engineering, 2004.

Pohlm, Fred W. – B.S. (University of Missouri), M.S. (University of Tennessee), Ph.D. (Kansas State University), Professor of Animal Science, 1997, 2011.

Poling, Richard L. – B.S., M.S., Ph.D (Ohio State University), Adjunct Associate Professor of Agricultural and Extension Education, 2010.

Popp, Valentin E. – M.S. (Moscow State University), Ph.D. (Agro-Physical Institute), Visiting Professor of Chemical Engineering, 1994.


Powell, F. Allen – B.S. (University of North Texas), M.S. (Amber University, Dallas), Instructor of Human Environmental Sciences, 2003.

Powell, Jeremy – B.S. (University of Arkansas), D.V.M. (Oklahoma State University), Ph.D. (University of Arkansas), Associate Professor of Animal Science, 2002, 2008.


Prior, Ronald L. – B.S. (University of Nebraska), Ph.D. (Cornell University), USDA-ARS Phytochemistry/Nutrition, Adjunct Associate Professor, 1987.


Proctor, Andrew – B.S. (Queen Mary College, University of London), M.S., Ph.D. (University of Arkansas), Professor of Food Science, 1992, 2001.


Puente, Lindsay – B.A. (University of California, Los Angeles), Ph.D. (University of California, Irvine), Assistant Professor of World Languages, 2010.

Pulay, Peter – M.S. (Eotvos L. University, Budapest), Ph.D. (University of Stuttgar), Roger Bost Professor of Chemistry and Biochemistry, 1982, 1983.

Pullen, Brian – B.S. (Arkansas Tech University), M.A. (University of Arkansas), Instructor in Management, 2005.

Pumphred, Neil R. – B.S., Ph.D. (University of Arkansas for Medical Sciences), Adjunct Research Assistant Professor of Poultry Science, 1999.

Purcell, Larry P. – B.S., M.S. (University of Georgia), Ph.D. (University of Florida), Professor of Crop, Soil, and Environmental Sciences and the Ben J. Altheimer Chair for Soybean Research, 1993, 2003.


Qian, Xianghong – B.S. (Nanjing University, PR. China), M.Phil., Ph.D. (George Washington University), Associate Professor of Chemical Engineering, 2011.

Quinn, William A. – B.A. (Xavier University), M.A., Ph.D. (Ohio State University), Professor of English, 1979, 1995.


Raich, Andrew S. – B.A. (Williams College), M.A., Ph.D. (University of Wisconsin), Assistant Professor of Mathematical Sciences, 2008.

Rainey, Daniel V. – B.S.A. (University of Arkansas), M.S., Ph.D. (Purdue University), Associate Professor of Agricultural Economics and Agribusiness, 2000, 2006.

Rainwater, Chase – B.S. (University of Arkansas), Ph.D. (University of Florida), Assistant Professor of Industrial Engineering, 2009.


Raper, Randy L. – B.S., (Mississippi State University), M.S. (Iowa State University) Ph.D. (Iowa State University), Adjunct Professor of Biological and Agricultural Engineering, 2010.

Rardin, Ronald – B.A., M.P.A. (University of Kansas), Ph.D. (Georgia Institute of Technology), Distinguished Professor of Industrial Engineering and the John and Mary Lib White Chair of Systems Integration, 2007.


Rawwagah, Fuad – B.S. (Yarmouk University), Ph.D. (University of Arkansas), Visiting Assistant Professor of Physics, 2011.

Reese, Dona J. – B.A. (Northwestern University), M.S.W., Ph.D. (University of Maryland), Assistant Professor of Social Work, 2000.

Reeves, Carol A. – B.S. (Georgia Southern College), M.A. (University of South Carolina), Ph.D. (University of Georgia), Professor of Management and the Cecil and Gwendolynd Cup Applied Professorship in Entrepreneurship, 1990, 2012.

Reid, Margaret F. – B.A. (University of Marburg, West Germany), M.A. (University of Bonn), M.P.A. (University of Oklahoma), M.B.A. (Central State University), Ph.D. (University of Oklahoma), Professor of Political Science, 1993, 2005.

Ref, Craig G. – B.A. (University of Toronto), M.B.A. (Dalhousie University), Ph.D. (University of Oregon), Associate Professor of Finance and Clete and Tammy Brewer Professorship in Business, 2001, 2006.

Restrepo, Luis Fernando – B.A. (Universidad Pontificia Bolivariana), M.A., Ph.D. (University of Maryland at College Park), Professor of World Languages, 1995, 2006.

Reuter, Richard – B.S, M.S., (Oklahoma State University), Ph.D. (Texas Tech University), Adjunct Assistant Professor of Animal Science, 2007, 2011.

Revelle, Glenda – B.A. (Rice University), M.A., Ph.D. (University of Michigan), Associate Professor of Human Environmental Sciences, 2010.

Reyes, Javier – B.A. (Instituto Tecnologico y de Estudios Superiores de Monterrey), Ph.D. (Texas A&M University), Associate Professor of Economics, 2003, 2009.

Reynolds, Michael – B.S.M.E. (Marquette University), M.S.M.E., Ph.D (Purdue University), Adjunct Assistant Professor, Mechanical Engineering, 2007.

Rhoads, Douglas D. – B.A., M.A. (Wichita State University), Ph.D. (Kansas State University), Professor of Biological Sciences, 1990, 2006.

Richardson, Michael D. – B.S. (Louisiana Tech University), M.S. (Louisiana State University), Ph.D. (University of Georgia), Professor of Horticulture, 1998, 2008.

Richardson, Vernon J. – B.S., M.B.A. (Bingham Young University), Ph.D. (University of Illinois at Urbana-Champaign), Professor and S. Robson Walton Chair in Accounting, 2005.

Ricke, Steven C. – B.S., M.S. (University of Illinois), Ph.D. (University of Wisconsin), Professor and the Donald “Buddy” Wray Chair in Food Safety, 2006.

Riec, Yo'Av – B.A. (Israel Institute of Technology), Ph.D. (University of Texas), Associate Professor of Mathematical Sciences, 2000, 2007.


Roberts, Trent – B.S. (Oklahoma State University), M.S. (University of Arizona), Ph.D. (University of Arkansas), Assistant Professor of Crop, Science, and Environmental Sciences, 2010.

Robertson, Lona – B.S., M.S. (Florida State University), Ed.D. (Indiana University, Bloomington), Associate Professor of Human Environmental Sciences, 2006.

Robbins, James A. – B.S. (University of Wisconsin), M.S. (University of Georgia), Ph.D. (University of California-Davis), Professor of Horticulture, 1998.

Robbins, Robert Thomas – B.S., M.S. (Kansas State University), Ph.D. (North Carolina State University), University Professor of Plant Pathology, 1979, 2008.

Robinson, Charles F. II – B.A. (University of Houston), M.A. (Rice University), Ph.D. (University of Houston), Professor of History, 1999, 2011.

Roe, Larry A. – B.S.M.E., M.S. (University of Mississippi), Ph.D. (University of Florida), PE., Associate Professor of Mechanical Engineering and Twenty-First Century Endowed Chair, 1994, 2000.

Roeder, Richard A. – B.A. (Glassboro State College), M.S., Ph.D. (Texas A&M University), Professor of Animal Science, 2002.


Rogers, Marilyn – B.A. (Northwestern State University, Louisiana), M.L.S. (Louisiana State University), Assistant Professor and Assistant Librarian, 1987.


Root, Sarah – B.S., (University of Pittsburgh), Ph.D. (University of Michigan), Assistant Professor of Industrial Engineering, 2007.

Roper, Donald Keith – B.S.Ch.E., (Bingham Young University), Ph.D. (University of Wisconsin-Madison), Associate Professor of Chemical Engineering, 2008.


Rosetti, Manuel D. – B.S. (University of Cincinnati), M.S., Ph.D. (Ohio State University), Professor of Industrial Engineering and John L. Imhoff Endowed Chair, 1999, 2010.


Rothrock, Craig S. – B.S. (Iowa State University), M.S., Ph.D. (University of Illinois), Professor of Plant Pathology, 1989, 1994.

Roto, Charles J. – B.Arch. (Louisiana State University), M.Arch. (Washington University), Clinical Assistant Professor of Architecture, 2007.


Rozier, Louise – Licence ès Lettres (Université des Lettres et Sciences Humaines, Besançon, France), M.A. (University of Arkansas), D.M.L. (Middlebury College), Associate Professor of World Languages, 2004, 2010.

Rudzinski, Russell – B.Arch. (Syracuse University), M.Arch. (Washington University), Clinical Assistant Professor of Architecture, 2000, 2010.

Ruiz, M. Reina – B.A. (University of Leon, Spain), M.A. (Kansas State University), Ph.D. (Washington University), Associate Professor of World Languages, 2001, 2007.


Rupe, John C. – B.A. (Goshen College), B.S. (Colorado State University), M.S., Ph.D. (University of Kentucky), Professor of Plant Pathology, 1984, 2001.

Russell, Mark – B.S., M.S. (Colorado State University), Ph.D. (Texas Tech University), Assistant Professor of Animal Science. 2010.

Rutger, J. Neil – B.S. (University of Illinois), M.S., Ph.D. (University of California-Davis), Adjunct Professor of Crop, Soil, and Environmental Sciences USDA (ARS), 1995.

Ryan, Jeffrey J. – B.A. (Colorado State University), M.A., Ph.D. (Rice University), Associate Professor of Political Science, 1990, 1996.


Sacharoff, Laurent – B.A. (Princeton University), J.D. (Columbia University), Assistant Professor of Law, 2010.
Sadaka, Samy – B.S., M.S., (Alexandria University, Egypt), Ph.D. (Dalhousie University Canada and Alexandria University, Egypt), Assistant Professor of Biological and Agricultural Engineering, 2007.

Sagers, Cynthia L. – B.A. (University of Iowa), Ph.D. (University of Utah), Professor of Biological Sciences, 1994, 2012.


Salamo, Gregory J. – B.S. (Brooklyn College), M.S. (Purdue University), Ph.D. (City University of New York), Distinguished Professor of Physics, 1975, 2005.

Salisbury, Lutishoor – B.Sc. (University of Guyana), M.Sc. (Loughborough University of Technology), Professor and Librarian, 1992, 2005.

Sampson, Kathryn A. – B.A. (University of Northern Iowa), J.D. (University of Iowa), Assistant Professor of Law, 1995, 2008.

Sanchez, Manuel – B.B.A., M.B.A., M.S., (St. Mary’s University), Ph.D. (University of Texas at San Antonio), Associate Professor of Accounting, 2007, 2012.

Saraswat, Dharmendra – B.S. (Allahabad University, India), M.S. (Indian Agril Res, Institute, India), Ph.D. (Ohio State University), Assistant Professor of Biological and Agricultural Engineering, 2007.

Sauer, Thomas J. – B.S. (University of Wisconsin – Stevens Point), M.S., Ph.D. (University of Wisconsin – Madison), Adjunct Assistant Professor of Crop, Soil, and Environmental Sciences, 1996.

Savin, Mary C. – B.S. (University of Notre Dame), M.S., Ph.D. (University of Rhode Island), Professor of Environmental, Soil, and Water Sciences, 2002, 2011.

Saylor, Ronald J. – B.S., M.S. (North Dakota State University), Ph.D. (University of California-Davis), Research Assistant Professor of Plant Pathology, 2006.

Saxena, Ashok – B.Sc. (Indian Institute of Technology), Ph.D. (University of Cincinnati), Twenty-First Century Endowed Chair in Materials Science and Engineering, and Distinguished Professor of Mechanical Engineering, 2003.


Schneider, Mary J. Grinsted – B.S.Ed. (Central Missouri State College), M.A., Ph.D. (University of Missouri), Professor of Anthropology, 1969, 1982.

Schneider, Susan A. – B.A. (College of St. Catherine), J.D. (University of Minnesota), LL.M., (University of Arkansas), Professor of Law, 1998, 2006.


Schroeder, David A. – B.S. (Purdue University), Ph.D. (Arizona State University), Professor of Psychology, 1976, 1989.

Schulte, Bret – B.A. (University of Nebraska), M.F.A. (George Mason University), Assistant Professor of Journalism, 2009.

Schulte, Stephanie R. – B.A. (University of Arkansas), M.A., Ph.D. (George Washington University), Assistant Professor of Communication, 2008.

Schweb, William A. – B.A. (Miami University), M.A. (University of Akron), M.A., Ph.D. (Ohio State University), Professor of History, 1976, 2011.

Schweiger, Beth Barton – B.A. (Stephen F. Austin State University), M.A., Ph.D. (University of Virginia), Associate Professor of History, 2000, 2006.

Scott, Allison – B.S.N., M.S.N. (University of Arkansas for Medical Sciences), Clinical Instructor of Nursing, 2006.

Scott, Robert C. – B.S., M.S. (Oklahoma State University), Ph.D. (Mississippi State University), Associate Professor of Crop, Soil, and Environmental Sciences, 2006.

Scott, Thad – B.S. (Howard Payne University), M.S. (Tarleton State University), Ph.D. (Baylor University), Assistant Professor of Crop, Soil and Environmental Sciences, 2008.

Seideman, Steven – B.S., M.S., Ph.D. (Texas A&M University), Extension Specialist of Food Science, 2002.

Selvam, Rathinam Panneer – B.E., M.E. (University of Madras, India), M.S.C.E. (South Dakota School of Mines and Technology), Ph.D. (Texas Tech University), P.E., Professor of Civil Engineering, 1986, 1999.


Seo, Han Seok – B.S. (Korea University, Seoul), M.Sc., Ph.D. (Seoul National University), Dr.Rer.Medic. (Technische Universität Dresden, Germany), Assistant Professor of Food Sensory Science, 2012.

Serrano, Christina – B.B.A. (Armstrong Atlantic State University), B.B.A., Ph.D. (University of Georgia), Assistant Professor of Information Systems, 2011.

Sersoff, Shannon L. – B.S. (University of Michigan), Ph.D. (Northwestern University), Assistant Professor of Chemical Engineering, 2007.

Setia, Pankaj – B.S. (University of Delhi, India), M.B.A. (Management Development Institute), Ph.D. (Michigan State University), Assistant Professor of Information Systems, 2008.

 Sexton, Danny – B.A., M.A. (University of Arkansas), Ph.D. (City University of New York, Graduate Center), Assistant Professor of English, 2010.


 Shafirstein, Gal – B.Sc. (Ben Gurion University, Israel), M.Sc. (Technion, Israel Institute of Technology), Adjunct Associate Professor of Biological and Agricultural Engineering, 2004.

 Shanks, Bruce C. – B.S. (Missouri State University), M.S. (Montana State University), Ph.D. (South Dakota State University), Adjunct Assistant Professor of Animal Science, 2011.

 Shannon, Graham F. – B.A., B.Arch. (University of Arkansas), M.Arch. in Urban Design (Rice University), Professor of Architecture, 1979, 1990.


 Sharpley, Andrew – B.S. (University College of North Wales), Ph.D. (Massey University, New Zealand), Professor of Crop, Soil, and Environmental Sciences, 2006.

 Sheng, Guangyao – B.S., M.S. (Nanjing University), Ph.D. (Michigan State University), Assistant Professor of Crop, Soil, and Environmental Sciences, 2000.


 Shew, Woodrow – B.A. (College of Wooster), Ph.D. (University of Maryland), Assistant Professor of Physics, 2012.

 Shields, Christopher – B.A., M.A., J.D., Ph.D. (University of Arkansas), Visiting Assistant Professor of Sociology and Criminal Justice, 2008.

 Shields, Todd G. – B.A. (Miami University), M.A., Ph.D. (University of Kentucky), Professor of Political Science, 1994, 2005.


 Sibley, Clnnesha D. – B.A. (Tulagalo College), M.F.A. (University of Arkansas), Assistant Professor of Drama, 2009, 2011.

 Siebenmorgen, Terrence J. – B.S.Ag.E. (University of Arkansas), M.S.Ag.E. (Purdue University), Ph.D. (University of Nebraska), P.E., University Professor of Food Science, 1984, 2006; Adjunct Professor of Chemical Engineering, 2004.

 Silano, Alfred L. – B.S. (Rutgers University), M.S. (Newark College of Engineering), Ph.D. (Rutgers University), Research Professor of Chemical Engineering, 1987.

 Silberman, Jeffrey D. – B.S., M.A. (Southern Methodist University), M.S. (Louisiana State University Medical Center), Ph.D. (University of Miami), Assistant Professor of Biological Sciences, 2004.

 Singh, Surendra P. – B.Sc., M.Sc. (Banaras Hindu University, India), M.A., Ph.D. (University of Rochester), Professor of Physics, 1982, 1992.
Sisson, Wendy – B.S.N. (Florida International University), M.N.Sc. (University of Arkansas for Medical Sciences), Clinical Instructor of Nursing, 2006.


Slavik, Michael F. – B.S. (Drake University), M.S., Ph.D. (Iowa State University), Professor of Poultry Science, 1977, 1995.


Smith, Brent L. – B.A. (Ouachita Baptist University), M.A., Ph.D. (Purdue University), Distinguished Professor of Sociology and Criminal Justice, 2008.

Smith, Carl A. – B.S.C. (University of Lancaster), M.A., Ph.D. (University of Sheffield), Assistant Professor of Landscape Architecture, 2007.


Smith, Joshua Byron – B.A. (University of Illinois at Chicago), M.A., Ph.D. (Northwestern University), Assistant Professor of English, 2011.

Smith, Kathleen R. – B.S. (Ohio State University), M.S., Ed.D. (University of Arkansas), Assistant Professor of Human Environmental Sciences, 1999, 2008.

Smith, Kenneth K. – B.S. (Stephen F. Austin State University), M.Ed., (Sam Houston State University), Ph.D. (Oklahoma State University), Professor of Crop, Soil, and Environmental Sciences, 1999, 2008.

Smith, Kimberly G. – B.S. (Tufts University), M.S. (University of Arkansas), Ph.D. (Utah State University), University Professor of Biological Sciences, 1981, 2009.

Smith, Ronna – B.S., M.S. (Montana State University), Ph.D. (Washington State University), Assistant Professor of Marketing, 2006.

Smith, Scott C. – B.S., M.S. (University of Missouri-Columbia), Ph.D. (University of Central Florida), Associate Professor of Electrical Engineering, 2007.


Smith-Blair, Nan – B.S.N. (Texas Christian University), M.S.N. (Northwestern State University, Louisiana), Ph.D. (University of Kansas), Associate Professor in Nursing, 1993, 2007.

Smith-Nix, Angela R. – B.S.E., M.S.E. (Arkansas State University), Ph.D. (University of Arkansas), Assistant Professor in Kinesiology, 1990, 2000.


Snyder, Tamara – B.S. (University of California-Los Angeles), M.S. (University of Arkansas), Lecturer of Physics, 2001, 2006.


Song, Joon Jin – B.S. (Yeungnam University), M.S. (Kyungpook National University), Ph.D. (Texas A&M), Associate Professor of Mathematical Sciences, 2005, 2011.


Soster, Robin – B.S., M.B.A., Ph.D. (University of South Carolina), Assistant Professor of Marketing, 2011.

Southward, Cheryl Leigh – B.S., M.S., Ph.D. (University of Tennessee), Associate Professor of Human Environmental Sciences, 2008.

Spearot, Douglas E. – B.S. (University of Michigan), M.S., Ph.D. (Georgia Institute of Technology), Associate Professor of Mechanical Engineering, 2005, 2011.


Spicer, Thomas O. III – B.S.Ch.E., M.S.Ch.E., Ph.D. (University of Arkansas), Professor of Chemical Engineering, 1984, 1996.

Spiegel, Frederick W. – B.A. (Drew University), Ph.D. (University of North Carolina), Professor of Biological Sciences, 1982, 2005.

Spradley, J. Ples – B.S. (Hendrix College), M.S. (University of Arkansas), Associate Professor of Plant Pathology and Extension Pesticide Specialist, 1984, 2003.


Srivastava, Vibha – B.S. (D.I.E. University), M.S. (Govind Ballabh Pant University of Agriculture and Technology), Ph.D. (Jawaharlal Nehru University, New Delhi), Professor of Plant Tissue Culture and Genetics, 2001, 2011.


Stapp, Robert – B.S.B.A. (Oklahoma City University), M.S., Ph.D. (Oklahoma State University), Clinical Professor of Economics, 1995, 2012.

Starks, Tricia – B.A. (University of Missouri), M.A., Ph.D. (Ohio State University), Associate Professor of History, 2000, 2006.

Stassen, Robert E. – B.S. (University of Minnesota), M.B.A., Ph.D. (University of Nebraska), Associate Professor of Marketing, 1989, 1995.

Stauss, Kim – B.S. (Stephen F. Austin State University), M.S.W. (California State University at Sacramento), Ph.D. (University of Utah), Professor of Social Work, 2006, 2012.

Stegman, Charles E. – B.A. (St. Mary’s College), M.A., Ph.D. (University of Mississippi), Professor of Educational Foundations, 1995.

Steinkraus, Donald C. – B.A. (Cornell University), M.S. (University of Connecticut), Ph.D. (Cornell University), Professor of Entomology, 1989, 1999.

Stenken, Julie – B.S. (University of Akron), Ph.D. (University of Kansas), Professor of Chemistry and Biochemistry, 2007.

Stephen, Frederick M. – B.A. (San Jose State University), Ph.D. (University of California, Berkeley), Associate Professor of Entomology, 1974, 1992.

Stephen, Judy – B.A. (Hendrix College), M.Ed. (University of Arkansas), Associate Professor of Counseling Education, 2004.


Stephenson, Daniel O. IV – B.S., M.S. (Auburn University), Ph.D. (University of Arkansas), Research Assistant Professor of Crop, Soil, and Environmental Sciences, 2005.

Stephenson, Steven – B.S. (Lynchburg College), M.S., Ph.D. (Virginia Polytechnic Institute and State University), Research Professor of Biological Sciences, 2003.


Stewart, Gay B. – B.S. (University of Arizona), M.S., Ph.D. (University of Illinois-Urbana-Champaign), Professor of Physics, 1994, 2011.


Stewart, Patrick – B.A. (University of Central Florida), Ph.D. (Northern Illinois University), Assistant Professor of Political Science, 2008.


Stockdell, Richard – B.S. (Northwest Missouri State University), M.A. (Kansas State University), Associate Professor of Journalism, 1980, 1986.

Stone, Patrick S. – B.A. (Doane College), M.F.A. (University of South Dakota), Assistant Professor of Drama, 2007.


Striping, Jeffrey S. – B.A. (Stanford University), Ph.D. (University of Colorado), Professor of Psychology, 1976, 1990.

Stroud, Russell V. – B.S.N. (University of Arkansas), M.S.N. (California State University-Los Angeles), Clinical Instructor of Nursing, 2012.
Studebaker, Glenn – B.S. (Missouri Southern University), M.S., Ph.D. (University of Arkansas), Associate Professor of Entomology, 1993.

Suarez, Celina – B.S. (Trinity University), M.S. (Temple University), Ph.D. (University of Kansas), Assistant Professor of Geology, 2012.

Sublette, Kerry L. – B.S. (University of Arkansas), M.S. (University of Oklahoma), M.S.E., Ph.D. (University of Tulsa), Adjunct Professor of Chemical Engineering, 2006.

Sullivan, Amanda L. – B.S.E., M.A.T., Ph.D. (University of Arkansas), Assistant Professor of Kinesiology, 2010.


Swartwood, Larry D. – B.A. (Southern Colorado State College), M.F.A. (University of Colorado), Visiting Assistant Professor of Art, 1993.


Sykes, Tracy – B.S. (University of Maryland), Ph.D. (University of Arkansas), Assistant Professor of Information Systems, 2011.

Szakasits, Monica – B.A. (Sam Houston State University), J.D. (Baylor University), M.S.L.I.S. (University of Texas), Associate Librarian, Law, 2004.

Szalanski, Allen L. – B.S.A. (University of Manitoba), M.S. (Kansas State University), Ph.D. (University of Nebraska), Professor of Entomology, 2001, 2010.

Takigiku, Susan K. – B.A. (University of Colorado), M.S. (Miami University, Ohio), Ph.D. (Purdue University), Assistant Professor of Human Environmental Sciences, 2001.

Tarvin, Timothy R. – B.A. (Hendrix College), J.D. (University of Arkansas), Associate Professor of Law, 1993, 2011.


Tchakalian, Jak – B.S., M.S., Ph.D. (University of British Columbia), Associate Professor of Physics, 2002, 2010.

Teague, Tina G. – B.S., M.S. (University of Arkansas), Ph.D. (Texas A&M University), Professor of Entomology, 1995.

Teague, William Ricky – B.B.A. (Memphis State University), M.S. (Webster University), Visiting Assistant Professor of Operations Management, 2002.

TeBeest, David O. – B.S. (Wisconsin State University), M.S., Ph.D. (University of Wisconsin), University Professor of Plant Pathology, 1975, 2003.

Teng, Fangzhen – B.S. (University of Science and Technology of China), Ph.D. (University of Maryland), Associate Professor of Geosciences, 2008, 2012.


Thaxton, Yvonne Vizzier – B.S., M.S. (Mississippi University for Women), Ph.D. (Auburn University), Professor of Poultry Science, 2011.

Thibado, Paul M. – B.S. (San Diego State University), Ph.D. (University of Pennsylvania), Professor of Physics, 1996, 2004.

Thoma, Gregory J. – B.S.Ch.E., M.S.Ch.E. (University of Arkansas), Ph.D. (Louisiana State University), PE, Professor of Chemical Engineering, 1993, 2005.


Thompson, Craig – B.S. (Stanford University), M.S., Ph.D. (University of Texas at Austin), Axiom Database Chair in Engineering and Professor of Computer Science and Computer Engineering, 2003.


Thompson, Dale R. – B.S., M.S. (Mississippi State University), Ph.D. (North Carolina State University), PE, Associate Professor of Computer Science and Computer Engineering, 2000, 2006.

Thompson, Marcella – B.A., M.S. (University of Arkansas), Instructor of Sociology and Criminal Justice, 1997.

Thompson, Randall J. – B.A. (Indiana University), M.L.S. (Indiana University), J.D. (University of Illinois), Associate Professor of Law, 2008.

Thompson, Timothy F. – B.M. (University of North Carolina, Chapel Hill), M.M. (University of Wisconsin), Professor of Music, 1979, 2002.

Thomsen, Michael R. – B.S., M.S. (Utah State University), Ph.D. (University of Minnesota), Associate Professor of Agricultural Economics and Agribusiness, 1998, 2004.

Thorbole, Chandrashekar K. – B.S. (University of Pune, India), M.S., Ph.D. (Wichita State University), Adjunct Assistant Professor of Biological and Agricultural Engineering, 2010.

Tian, Zhengrong Ryan – B.S. (Fudan University, Shanghai), Ph.D. (University of Connecticut), Associate Professor of Chemistry and Biochemistry, 2004, 2010.

Tipsmark, Christian K. – M.S., Ph.D. (University of Southern Denmark), Assistant Professor of Biological Sciences, 2010.

Tjani, Maria – B.S. (University of Ioannina, Greece), M.S. (Purdue University), Ph.D. (Michigan State University), Assistant Professor of Mathematical Sciences, 1996, 2008.

Ton, Gary M. – B.S. (University of Mississippi), M.S. (University of Arkansas), Visiting Assistant Professor of Operations Management, 2000.

Toner, Mary Ann – B.S., M.S. (University of Wyoming), Ph.D. (University of Oklahoma), Associate Professor of Communication Disorders, 1990, 1996.


Troxel, Tom R. – B.S. (West Texas State University), M.S., Ph.D. (University of Illinois), Professor of Animal Science, 1993.

Tschepekow, Nick – B.S., M.S. (Henderson State University), Ed.S. (University of Arkansas), Adjunct Instructor of Curriculum and Instruction, 2007.

Tullis, Jason – B.S. (Brigham Young University), M.S., Ph.D. (University of South Carolina), Associate Professor of Geography, 2004, 2010.

Tung, Chao-Hung S. – B.S.M.E. (National Taiwan University), M.S.M.E., Ph.D. (University of Houston), Associate Professor of Mechanical Engineering, 2000, 2005.


Turner, Lori W. – B.S. (Florida State University), M.S. (Florida International University), M.S. (Florida State University), Ph.D. (University of Alabama), Associate Professor of Health Science, 1997, 2002.


Tyndall, C. Patrick – B.A. (Wabash College), M.A. (Miami University at Ohio), Ph.D. (University of Texas), Assistant Professor of Drama, 1999, 2002.

Tzametas, Ioannis – B.S., M.S. (Agricultural University of Athens, Greece), Ph.D. (Oregon State University), Assistant Professor in Plant Pathology, 2008.

Ulrich, Richard K. – B.S.Ch.E. (University of Texas), M.S.Ch.E. (University of Illinois), Ph.D. (University of Texas, Austin), PE, Professor of Chemical Engineering, 1987, 1995.


VanDevender, Karl – B.S., M.S. (Mississippi State University), Ph.D. (University of Arkansas), Professor of Biological and Agricultural Engineering, 1995, 2004.

Vann, Stephen R. – B.S., M.S. (Mississippi State University), Ph.D. (Texas A&M University), Assistant Professor of Plant Pathology, 2002, 2003.

Varadan, Vasundara – B.Sc., M.Sc. (University of Kerala, Cochin, India), M.S., Ph.D (University of Illinois), George and Boyle Billingsley Endowed Chair and Distinguished Professor of Electrical Engineering, 2005.


Veden, Mary Lynn – B.A. (Lewis and Clark College), M.A., Ph.D. (University of Washington), Assistant Professor of Communication, 2011.
Veilleux, Jennifer C. – B.A. (Macalester College), M.A., Ph.D. (University of Illinois at Chicago), Assistant Professor of Psychology, 2011.

Verma, Lalit R. – B.Tech. (J.N. Agricultural University, Jabalpur, India), M.S. (Montana State University), Ph.D. (University of Nebraska), P.E., Professor of Biological and Agricultural Engineering, 2000.

Vickers, Kenneth – B.S., M.S. (University of Arkansas), Research Professor of Physics, 1998.

Villalobos, Sergio – B.A. (Universidad ARCIS-Chile), M.A., Ph.D. (University of Pittsburgh), Associate Professor of World Languages, 2005, 2011.


Viswaneth, Vinkatesh – B.E. (Bharathiar University, India), Ph.D. (University of Minnesota), Distinguished Professor and the George and Boyle Billingsley Endowed Chair in Information Systems, 2004, 2011.

Vitale, Davide – Diploma in Architecture (University of Rome), M.Arch. (Harvard Graduate School of Design), Professor of Architecture, 1985, 1997.

Vowell-Johnson, Kelly – B.S.N. (Arkansas Tech University), M.N.Sc. (University of Arkansas for Medical Sciences), Clinical Instructor of Nursing, 2011.

Vyas, Reeta – B.S., M.S. (Banaras Hindu University), Ph.D. (State University of New York at Buffalo), Professor of Physics, 1989, 2002.

Wade, Leslie A. – B.A. (Tulane University), M.A. (Duke University), M.F.A. (University of Georgia), Ph.D. (University of California, Santa Barbara), Professor of Drama, 2011.

Wail, Eric J. – B.S. (Cornell University), Ph.D. (Michigan State University), Distinguished Professor of Agricultural Economics and Agribusiness; L.C. Carter Endowed Chair in Rice and Soybeans, 1980, 2011.


Walker, James M. – B.S., M.S. (Louisiana Polytechnic Institute), Ph.D. (University of Colorado), Professor of Biological Sciences, 1965, 1976.

Walker, Kasey L. – B.A., B.S. (Trinity University), M.A., Ph.D. (Purdue University), Assistant Professor of Communication, 2008.

Walker, Mary A. – B.A. (University of Arkansas), M.L.S. (University of North Texas), Assistant Professor and Assistant Librarian, 2001.


Wallis, Brenda J. – B.S.N. (Northwestern State University), M.S.N. (University of Oklahoma), Clinical Instructor of Nursing, 2011.


Wamishe, Yeshi Andenow – B.S., M.S. (Addis Ababa University), Ph.D. (University of Arkansas) Assistant Professor and Extension Plant Pathologist, 2011.


Wang, Neil – B.S., M.S. (ShanDong University), Ph.D. (China Academy Sinica), Ph.D. (Syracuse University), Assistant Professor of Finance, 2008.

Wang, Ya-Jane – B.S. (National Taiwan University), M.S. (University of Minnesota-Twin Cities), Ph.D. (Iowa State University), Professor of Food Science, 1999, 2009.


Wardlow, George W. – B.S., M.Ed. (University of Missouri), Ph.D. (Ohio State University), Professor of Agricultural and Extension Education, 1992, 1998.

Warnock, Mary M. – B.A. (Texas Christian University), M.S., Ph.D. (Texas Woman’s University), Professor of Human Environmental Sciences, 1976, 1996.


Warren, W. Dale – B.S. (Austin Peay State University), M.M. (University of Kentucky), Associate Professor of Music, 1991.

Washington, Tyrone – B.S., Ph.D. (University of South Carolina), Assistant Professor of Kinesiology, 2011.

Watkins, Bradley – B.S., M.S. (University of Arkansas), Ph.D. (Oklahoma State University), Research Assistant Professor of Agricultural Economics, 2002.

Watkins, Patsy – B.A., M.A. (University of Texas, Austin), Ph.D. (University of Iowa), Associate Professor of Journalism, 1984, 1992.


Watson, Douglas – B.S. (Gallaudet College), M.S. (Southern Illinois University), Ph.D. (Florida State University), Professor of Rehabilitation Education and Research, 1982, 1984.


Way, Kelly A. – B.S., M.S. (Oklahoma State University), Assistant Professor of Human Environmental Sciences, 2006.

Webb, Jennifer D. – B.S., M.S. (University of Tennessee), Ph.D. (Oklahoma State University), Associate Professor of Interior Design, 1999, 2005.


Webster, Jim – B.S. (Purdue University), M.B.A. (University of Arkansas), Ph.D. (University of Arizona), Instructor of Finance, 2011.

Weeks, Rex – B.A. (University of Tennessee), M.A., Ph.D. (Arizona State University), Assistant Professor of Geosciences, 2010.

Wejinya, Uchechukwu C. – B.S., M.S., Ph.D. (Michigan State University), Assistant Professor of Mechanical Engineering, 2008.

Welcome, Leiaka – B.S. (Midwestern State University), M.S. (University of Arkansas), Instructor of Geology, 2011.

West, Charles P. – B.S., M.S. (University of Minnesota), Ph.D. (Iowa State University), Professor of Crop, Soil, and Environmental Sciences, 1984, 1995.

West, Elliott – B.S. (University of Texas, Austin), M.A., Ph.D. (University of Colorado), Distinguished Professor of History, 1979, 2000.

West, Leon – B.S. (University of Arkansas), Ph.D. (Florida State University), P.E., Professor of Mechanical Engineering, 1982, 1990.


White, Calvin Jr. – B.A., M.A. (University of Central Arkansas), Ph.D. (University of Mississippi), Assistant Professor of History, 2007.

White, John A. – B.S.E. (University of Arkansas), M.S.E. (Virginia Polytechnic Institute), Ph.D. (Ohio State University), Distinguished Professor of Industrial Engineering and Chancellor Emeritus, 1997.

Wickramasinghe, S. Ranil – B.S., M.S. (University of Wisconsin, Madison), Assistant Professor of History, 1996.

Wicks, Jan LeBlanc – B.A. (University of Missouri – Columbia), M.A., Ph.D. (University of Mississippi), Professor of Journalism, 1994, 2006.


Wideman, Robert F. – B.A. (University of Delaware), M.S., Ph.D. (University of Connecticut), Professor of Poultry Science, 1993.

Widick, J. Darell – B.S.A. (University of Arkansas), M.S., Ph.D. (University of Arkansas), Research Assistant Professor of Agronomy, 1982.

Wiedenmann, Robert – B.S., Ph.D. (Purdue University), Professor of Entomology, 2005.


Wiersma, Jacquelyn – B.A. (University of Northern Iowa), M.S. (Arizona State University), Ph.D. (Texas Tech University), Assistant Professor of Human Environmental Sciences, 2010.

Wilke, Stephen B. – B.S. (Middle Tennessee State University), J.D., M.P.A. (University of Memphis), Visiting Assistant Professor of Operations Management, 1996.
Wilkins, Charles L. – B.S. (Chapman College), Ph.D. (University of Oregon), Distinguished Professor of Chemistry and Biochemistry, 1998.

Williams, Brent – B.A. (Austin College), M.S. (University of Texas Southwestern Medical Center - Dallas), Ph.D. (University of Illinois at Urbana-Champaign), Associate Professor of Rehabilitation Education and Research, 2002, 2009.

Williams, Brent D. – B.A. (Lyon College), M.T.L.M., Ph.D. (University of Arkansas), Assistant Professor of Supply Chain Management, 2011.


Williams, Nathan L. – B.A. (Pennsylvania State University), M.A., Ph.D. (George Mason University), Associate Professor of Psychology, 2002, 2008.

Williams, Patrick G. – B.A. (University of Texas), M.A., Ph.D. (Columbia University), Associate Professor of History, 2000, 2006.

Williams, Rodney – B.S.C.E., M.S.C.E., Ph.D. (University of Arkansas), Adjunct Assistant Professor of Civil Engineering, 2000.

Williams, Stacy – B.S.C.E., M.S.C.E., Ph.D. (University of Arkansas), Assistant Professor of Civil Engineering, 2001.

Williamson, Phillip C. – Ph.D. (University of North Texas), Adjunct Professor of Entomology, 2007.


Wilson, C.E. Jr. – B.S.A. (Arkansas State University), M.S., Ph.D. (University of Arkansas), Professor of Crop, Soil, and Environmental Sciences, 1998, 2003.


Wimberly, Jim – B.S., M.S. (Louisiana State University), Adjunct Assistant Professor of Biological and Agricultural Engineering, 1999.

Winston, Byron – B.S. (Midwestern State University), M.S., Ph.D. (University of Arkansas), Instructor of Geology, 2011.

Wiseman, Cindy – B.F.A. (University of Arkansas), M.F.A. (New Mexico State University), Assistant Professor of Curriculum and Instruction, 2009.

Wisseh, Catherine – B.S., M.N.S.Ed. (Southeast Missouri State University), Ph.D. (University of Missouri-Columbia), Assistant Professor of Curriculum and Instruction, 2009.

Williamson, Phillip C. – Ph.D. (University of North Texas), Adjunct Professor of Entomology, 2007.

Witherbee, Amy – B.A. (Columbia University), M.A., Ph.D. (Boston College), Assistant Professor of English, 2010.

Wolchok, Jeffrey C. – B.S., M.S. (University of California at Davis), Ph.D. (University of Utah), 2011.

Wolf, Duane C. – B.S., M.S. (University of Missouri-Columbia), Ph.D. (University of California, Riverside), University Professor of Crop, Soil, and Environmental Sciences, 1979, 1996.


Woodland, Janet C. – B.A. (King’s College, Wilkes-Barre, Penn.), M.A., Ph.D. (State University of New York at Stony Brook), Clinical Assistant Professor of Mathematical Sciences, 1993, 2009.


Worden, Steven K. – B.S., M.A. (Portland State University), Ph.D. (University of Texas, Austin), Associate Professor of Sociology and Criminal Justice, 1987, 1993.

Worrell, Dan – B.S., M.S., Ph.D. (Louisiana State University), Professor of Management and Sam M. Walton Leadership Chair, 2005.

Worrell, Diane Featherston – B.S., M.S.W., M.L.S. (Louisiana State University), Ph.D. (Texas Woman’s University), Adjunct Assistant Professor and Adjunct Assistant Librarian, 2005.

Worthen, Diana Gonzales – B.S. (University of Houston), M.A.T. (University of Texas), Ph.D. (University of Arkansas), Adjunct Instructor of Curriculum and Instruction, 2007.

Wu, Jingxian – B.S. (Beijing University of Aeronautics and Astronautics), M.S. (Tsinghua University), Ph.D. (University of Missouri-Columbia), Assistant Professor of Electrical Engineering, 2008.

Xiao, Min – B.S. (Nanjing University), Ph.D. (University of Texas), Distinguished Professor of Physics, 1990, 2004.

Xie, Kangzhen – B.E. (Beijing University), M.A. (University of Alabama), Ph.D. (Washington University in St. Louis), Assistant Professor of Finance.

Xie, Xiangyang – B.S. (Lanzhou University China), M.S. (Northwest University China), Ph.D. (University of Wyoming), Assistant Professor of Geosciences, 2010.

Yang, Song – B.A. (Branch College of Nankai, China), M.A. (Nankai University, China), Ph.D. (University of Minnesota), Associate Professor of Sociology and Criminal Justice, 2002, 2008.

Yanoviai, Stephen P. – B.S. (Auburn University), M.S. (Purdue University), Ph.D. (University of Oklahoma), Adjunct Professor of Entomology, 2008.

Yazwinski, Thomas Anthony – B.S. (University of Vermont), M.S. (University of Maine), Ph.D. (North Carolina State University), University Professor of Animal Science, 1977, 2004; Adjunct Professor of Poultry Science, 2012.

Ye, Kaiming – B.S., M.S., Ph.D. (East China University of Science and Technology), Professor of Biomedical Engineering, 2003, 2012.

Yeager, Milton P. Jr. – B.S. (University of Southern Mississippi), M.S. (University of Arkansas), Visiting Assistant Professor of Operations Management, 1989.

Yeager, Tim – M.A., Ph.D. (Washington University), Associate Professor and Arkansas Bankers Association Chair in Banking, 2006.

Young, Elizabeth – B.A. (Hendrix College), J.D. (George Washington University), Associate Professor of Law, 2008, 2011.

Young, Juana R. – B.A. (Texas Tech University), M.L.S. (North Texas State University), Professor and Librarian, 1972, 1984.

Yu, Shui-Qing (Fisher) – B.S., M.S. (Peking University), Ph.D. (Arizona State University), Assistant Professor of Electrical Engineering, 2008.

Zachry, Doy L. Jr. – B.S., M.S. (University of Arkansas), Ph.D. (University of Texas, Austin), Professor of Geology, 1968, 1987.

Zaharoff, David A. – B.S. (University of Illinois at Urbana-Champaign), Ph.D. (Duke University), Assistant Professor of Biomedical Engineering, 2009.

Zajicek, Anna M. – B.S., M.S. (University of Silesia, Poland), Ph.D. (Virginia Polytechnic Institute and State University), Professor of Sociology and Criminal Justice, 1994, 2006.

Zelenka, Daniel J. – B.S.A. (University of Illinois), M.S., Ph.D. (Virginia Tech and State University), Adjunct Professor of Poultry Science, 1985.

Zeng, Ka – B.A. (Foreign Affairs College, Beijing), M.A. (Virginia Polytechnic Institute and State University), Ph.D. (University of Virginia), Professor of Political Science, 2000, 2011.

Zhang, Shengfan – B.M. (Fudan University, Shanghai), M.I.E. (North Carolina State University), Assistant Professor of Industrial Engineering, 2011.

Zhang, Wen – B.S.C.E. (Tongji University, Shanghai, China), M.S.C.E. (University of Kansas), Ph.D. (Purdue University, Indiana) Assistant Professor of Civil Engineering, 2011.

Zheng, Nan – B.S. (University of Science and Technology of China), M.S. (University of Rochester), Ph.D. (University of Michigan), Assistant Professor of Chemistry and Biochemistry, 2008.

Zhengrong, Ryan Tian – B.S. (Fudan University, Shanghai), Ph.D. (University of Connecticut), Associate Professor of Chemistry and Biochemistry, 2004, 2010.

Ziegler, Joseph A. – B.A. (St. Mary’s College), Ph.D. (University of Notre Dame), Professor of Economics, 1973, 1980.

Zies, Brenda – B.S. (East Texas State University), M.A., Ph.D. (University of Arkansas), Visiting Assistant Professor of Psychology, 2005.


Zou, Min – B.S.A.E., M.S.A.E. (Northwestern Polytechnical University), M.S.M.E., Ph.D. (Georgia Institute of Technology), Associate Professor of Mechanical Engineering, 2003, 2008.

Zou, Tim Jiping – B.A. (Shandong University), M.S., Ph.D. (University of Illinois, Urbana-Champaign), Associate Professor and Associate Librarian, 2004.
Glossary

**Academic Warning.** A status resulting from unsatisfactory grades.

**Act 1052/467.** Section 21 of Arkansas Act 467 of 1989 specifies that all first-time entering freshmen who are enrolled in a bachelor's degree program will be placed in either college-level credit courses in English and mathematics or developmental courses in English composition, reading, and mathematics on the basis of their scores on specified tests. See the Registration portion of the Orientation and Registration chapter for more information.

**Advance Registration.** A period of time scheduled during a regular (fall or spring) semester that allows currently enrolled students to register for the next regular semester. In addition, advance registration for the summer sessions is scheduled during the spring semester.

**Audit.** To take a course without credit.

**Adviser.** A faculty or staff member assigned to a student to advise that student on academic matters that include degree requirements and selection of courses.

**Class Schedule.** List of courses and sections for a specific semester, including names of instructors; day, hour, and place of class meetings; and detailed registration procedures. The class schedule is available online.

**College or School.** One of ten major divisions within the University that offers specialized curricula.

**Concentration.** A subset of a major's requirements leading to a graduate or bachelor's degree.

**Consent.** A prerequisite that requires the student to obtain approval from the instructor or the department before he or she will be allowed to register for the course.

**Core.** See **University Core** below.

**Corequisite.** A course that must be taken at the same time as the course described.

**Course.** A unit of academic instruction.

**Course Deficiencies.** Lacking required units of study in high school. See the Placement and Proficiency portion of the Admission chapter.

**Course Load.** The number of semester credit hours a student may schedule in a given term.

**Cumulative Grade-Point Average.** An average computed by dividing the total number of grade points earned by the total number of credit hours attempted in all courses for which grades (rather than marks) are given.

**Curriculum.** A program of courses comprising the formal requirements for a degree in a particular field of study.

**Degree Program.** A complete course of study inclusive of all University, college, and departmental requirements.

**Department.** Division of faculty or instruction within a college, such as Department of Accounting within the Sam M. Walton College of Business.

**Dependent Major.** See **Second Major** below.

**Drop/Add.** Official dropping or adding of courses for which students are registered during specified times as published in the schedule of classes. See also **Withdrawal** below.

**Eight-Semester Degree Completion Program.** Most majors offered by the University of Arkansas can be completed in eight semesters, and the University provides plans that show students which classes to take each semester in order to finish in eight semesters. A few majors either require a summer internship or fieldwork, and may therefore not qualify for the eight-semester degree completion program.

**Elective.** A course not required but one that a student chooses to take.

**Equivalent.** A course allowed in place of a similar course in the same academic discipline. May require approval by an academic dean.

**Fee.** Charges, additional to tuition, that cover specific University services, programs, facilities, activities and/or events. See the Fee and Cost Estimates chapter of this catalog for a full list of fees.

**Fee Waiver.** A form waivering the payment of fees for specific services, programs, facilities, activities and/or events. See the Fee and Cost Estimates chapter of this catalog for a full list of fees.

**Grade Points.** Points per semester hour assigned to a grade (not a mark), indicating numerical value of the grade. The grade-point average indicates overall performance and is computed by dividing the total number of grade points earned by the number of semester hours attempted.

**Grade Sanction(s).** A penalty for academic dishonesty. Grade sanctions may consist of either a grade of zero or a failing grade on part or all of a submitted assignment or examination or the lowering of a course grade, or a failing grade of XF to denote failure by academic dishonesty.

**Hazing.** Any activity that is required of an individual that may cause mental or physical stress and/or embarrassment when in the process of joining or belonging to any organization.

**Integrated Student Information System (ISIS).** The online database that maintains student, faculty and staff records and class schedules.

**Laboratory.** Descriptive of work other than class work, such as experimentation and practical application.

**Lecture.** A class session in which an instructor speaks on a specific topic.

**Major.** A main or primary discipline in which a student completes a designated number of courses and hours of credit.

**Minor.** A second discipline or area of study in which a student concentrates in addition to the student's major; each approved minor requires a minimum of 15 hours in a designated discipline.

**Noncredit Course.** A course for which no credit is given. (Some credit courses will not count toward degrees.)
**Overload.** A course load of more semester hours than a student is normally permitted to schedule in a given period.

**Prerequisite.** A course or requirement that must be completed before the term when the described course is taken.

**Registration.** Enrollment at the beginning or prior to the beginning of a semester, including selection of classes and payment of fees and tuition.

**Sanction(s).** The penalty for noncompliance to a policy. Usually a response that will redirect the individual or group's inappropriate behavior, encourage responsible judgment and ethical reasoning, protect the community's property and rights, and affirm the integrity of the institution's conduct standards.

**Section.** A division of a course for instruction. A course may be taught in one or more sections or classes or at different times, depending on enrollment in the course.

**Second Major.** A major that is not offered independently but which a student may pursue in addition to a primary major.

**Semester Credit Hour.** Unit of measure of college work. One semester credit hour is normally equivalent to one hour of class work or from two to six hours of laboratory work per week for a semester.

**State Minimum Core.** See University Core below.

**Student Number.** A number given to each student as a permanent identification number for use at the University.

**Summer Sessions.** Periods of time during the summer when course work is offered. (See the calendar or the summer class schedule for specific times and dates.)

**Suspension.** A status in which students are not permitted to register for courses for a specified time period.

**Syllabus.** An outline or summary of the main points of a course of study, lecture, or text.

**Transcript.** A copy of a student's academic record.

**Tuition.** The charge for University enrollment and registration, calculated per credit hour each semester. Tuition rates may vary depending on a student's resident status, undergraduate or graduate standing, and college affiliation. Tuition does not include cost of room and board. Additional charges will apply depending on student status. See the entry for Fees above.

**Undeclared Major.** Designation indicating students who have not selected a major.

**Undergraduate Study.** Work taken toward earning an associate or a baccalaureate degree.

**University Core.** The state of Arkansas specifies a number of core courses that students must successfully pass to obtain a degree. These are also sometimes referred to as the State Minimum Core. See the Requirements for Graduation and University Core portions of the Academic Regulations for more information.

**Withdrawal.** Official withdrawal from all courses during a semester at the University.
Course Descriptions

How to Read a Course Description ......................................................... 307
AAST (African-American Studies) ......................................................... 308
ACCT (Accounting) ........................................................................... 308
ADDL (Adult Lifelong Learning) ........................................................ 309
AERO (Air Force ROTC) ...................................................................... 310
AFIL (Agricultural, Food and Life Sciences) .......................................... 310
AGED (Agricultural Education) ........................................................... 311
AGME (Agricultural Mechanization) .................................................... 312
AGST (Agricultural Statistics) ............................................................... 313
AIM (Asian Studies) ............................................................................. 313
AMST (American Studies) ................................................................. 313
ANSC (Animal Science) ...................................................................... 313
ANTH (Anthropology) ......................................................................... 314
ARAB (Arabic) ..................................................................................... 316
ARCH (Architecture) .......................................................................... 316
ARED (Art Education) .......................................................................... 317
ARTH (Art History) ............................................................................. 317
ARSC (Arts and Sciences) ................................................................. 318
ARTS (Art) .......................................................................................... 318
ASTR (Astronomy) .............................................................................. 319
ATTN (Athletic Training) .................................................................... 320
BENG (Biological Engineering) .......................................................... 320
BIOL (Biology) ................................................................................... 322
BLAW (Business Law) ......................................................................... 325
BMGE (Biomedical Engineering) ....................................................... 325
CATE (Career and Technical Education) .............................................. 326
CDIS (Communication Disorders) ..................................................... 326
CEMB (Cell and Molecular Biology) .................................................. 327
CHEG (Chemical Engineering) ......................................................... 327
CHEM (Chemistry) ............................................................................. 328
CHIN (Chinese) .................................................................................. 330
CHLP (Community Health Promotion) .............................................. 330
CIED (Curriculum and Instruction) .................................................... 331
CLST (Classical Studies) .................................................................... 335
CMJS (Criminal Justice) ..................................................................... 335
CNED (Counselor Education) ............................................................ 335
COMM (Communication) ................................................................. 336
CSCE (Computer Science and Computer Engineering) ....................... 338
CSES (Crop, Soil and Environmental Sciences) .................................... 339
CVEG (Civil Engineering) ................................................................. 340
DANC (Dance) .................................................................................. 341
DEAC (Dance Education/Activity) ..................................................... 341
DRAM (Drama) ................................................................................... 341
EASL (English as Second Language) .................................................. 344
ECON (Economics) ............................................................................ 344
EDFD (Educational Foundations) ....................................................... 345
EDLE (Educational Leadership) ........................................................ 345
EDRE (Education Reform) ................................................................. 346
EDUC (Education) .............................................................................. 346
ELEG (Electrical Engineering) ............................................................ 346
ENDY (Environmental Dynamics) .................................................... 349
ENGL (English) ................................................................................... 349
ENSC (Environmental Science) ......................................................... 351
ENTO (Entomology) ............................................................................ 352
ESRM (Educational Statistics and Research Methods) ......................... 352
ETEC (Educational Technology) ........................................................ 353
EXED (Extension Education) ............................................................ 353
FDSC (Food Science) ........................................................................ 353
FINN (Finance) .................................................................................. 354
FREN (French) .................................................................................... 355
GEOG (Geography) ............................................................................ 355
GEOL (Geology) ................................................................................ 356
GEOS (Geosciences) ......................................................................... 357
GERM (German) ................................................................................ 357
GERO (Gerontology) .......................................................................... 358
GNEG (General Engineering) ............................................................ 358
GREK (Greek) .................................................................................... 359
GRSD (Graduate Education Courses) ................................................ 359
HESC (Human Environmental Sciences) ............................................ 359
HHPR (Health, Human Performance and Recreation) ......................... 361
HIED (Higher Education) ................................................................. 362
HIST (History) ................................................................................... 362
HNNED (Honors, College of Education and Health Professions) .......... 365
HORT (Horticulture) ........................................................................... 365
HRDV (Human Resources Development) .......................................... 366
HRWD (Human Resource and Workforce Dev) .................................... 366
HUMN (Humanities) .......................................................................... 367
IDES (Interior Design) ........................................................................ 367
INEG (Industrial Engineering) ........................................................... 368
IRFL (International Relations) ............................................................ 368
ISYS (Information Systems) ............................................................... 369
ITAL (Italian) ..................................................................................... 371
JAPN (Japanese) ................................................................................ 371
JOUR (Journalism) ............................................................................. 371
KINS (Kinesiology) ........................................................................... 372
LARC (Landscape Architecture) ....................................................... 373
LAST (Latin-American and Latino Studies) ......................................... 375
LATN (Latin) ...................................................................................... 375
LAWW (Law) ..................................................................................... 375
MAT (Mathematics) .......................................................................... 378
MBAD (Masters of Business Administration) ..................................... 380
MEEG (Mechanical Engineering) ...................................................... 380
MEPH (Microelectronics-Photonics) ............................................... 382
MEST (Middle East Studies) ............................................................. 382
MGMT (Management) ...................................................................... 383
MILS (Army ROTC) ........................................................................... 383
MKTG (Marketing) ........................................................................... 384
MLIT (Music Literature) .................................................................... 384
MUAC (Music Applied Class) ........................................................... 386
MUAP (Music Private Instruction) ..................................................... 386
MUCD (Music Education) ............................................................... 387
MUPD (Music Pedagogy) .................................................................. 389
MUSC (Music) ................................................................................... 389
MUSY (Ethnomusicology) ................................................................. 389
MUTH (Music Theory) ....................................................................... 390
NURS (Nursing) ................................................................................ 390
OMGT (Operations Management) .................................................... 392
PADM (Public Administration) .......................................................... 392
PEAC (Physical Education/Activity) ................................................ 393
PHED (Physical Education) .............................................................. 393
PHIL (Philosophy) ............................................................................ 394
PHYS (Physics) .................................................................................. 394
PLPA (Plant Pathology) ..................................................................... 396
PLSC (Political Science) .................................................................... 396
POSC (Poultry Science) .................................................................... 398
PSYC (Psychology) ........................................................................... 399
PTSC (Plant Science) ......................................................................... 400
PUBP (Public Policy) ......................................................................... 400
REM (Recreation and Sport Management) .......................................... 400
RHAB (Rehabilitation Education) ..................................................... 401
RSCD (Rural Sociology) .................................................................... 402
RUSS (Russian) .................................................................................. 402
SCWK (Social Work) .......................................................................... 403
SOC (Sociology) ................................................................................ 403
SPAC (Space and Planetary Sciences) .............................................. 404
SPAN (Spanish) ................................................................................ 404
SPCM (Supply Chain Management) ................................................ 405
STAT (Statistics) ................................................................................ 405
SUST (Sustainability) ......................................................................... 406
SWAH (Swahili) ................................................................................ 406
TEED (Technology Education) .......................................................... 406
UACS (UA Clinton School) ............................................................... 406
VAED (Vocational and Adult Education) .......................................... 406
WCCB (Walton College of Business) .............................................. 406
WDEP (Workforce Development) .................................................... 407
WFL (World Literature) ..................................................................... 408
WLLC (World Languages, Literatures and Cultures) ......................... 408

How to Read a Course Description

Courses listed in this section describe all courses approved for offering by the University of Arkansas. The courses are listed alphabetically by code. The word “course” refers to a unit of academic instruction, while the word “class” refers to a course scheduled during a semester or summer session with a certain number of prescribed meetings each week. Successful completion of a class usually earns a specified number of semester hours of credit toward a degree.

The Schedule of Classes lists classes available in a specific semester, along with the instructor of record, time and place the class is being held.
Course Descriptions

Course Description Explanations
A course listing comprises the following elements, in order:

Course Prefix: This alpha descriptor is the first identifying part of a course. This four-letter code represents the course prefix name. Usually, the course prefix will be the same as the department offering the course, but occasionally the prefix is one of many different courses offered in a single department. For example, ARAB refers to Arabic courses, which are offered through the Department of World Languages, Literatures and Cultures.

Course Number: Each course is designated by a four-digit number. The first digit identifies the level of the course: 1, freshman level; 2, sophomore level; 3 and 4, junior-senior level; 5, 6, and 7, graduate level. Any exceptions to this practice are stated in the course descriptions.

Students desiring admission to courses offered at levels beyond their standing should request the instructor's permission to enroll. (For definitions of academic status see Student Status on page 38.)

The second and third digits of the number identify the course within the department that offers it.

The fourth digit identifies the semester-hour value of the course. Credit for certain courses does not count toward some degrees (see Courses That Do Not Count Toward Degrees on page 27.)

Normally, courses meet once each week for 50 minutes for each hour of course credit. Laboratory, drill and other kinds of activity courses typically meet for two 50-minute periods per week for each hour of credit.

The letter 'V' is used in place of the last digit for those courses in which credit is variable. The letter 'X' is used in place of the last digit for those courses in which fixed credit is ten or more hours.

Course Suffix: A suffix to the course number further identifies the specific type of instruction: C - Drill or Lab Component L - Laboratory H - Honors Course M - Honors Laboratory

A course with no suffix is a typical lecture course (not an honors course).

Course Title: The title of the course is printed in bold letters.

Course Semester Offering: Course titles are followed by abbreviations (in parentheses) for the semester in which the course is normally offered. Cross-check with the Schedule of Classes to determine if a course is being offered. Courses marked (Sp) will be offered in the spring, courses marked (Fa) will be offered in the fall, courses marked (Su) will be offered in the summer, and courses marked (Irregular) will be offered irregularly. Consult the Schedule of Classes to verify that a course is being offered for a given term.

Course Description: A brief description of the course content and its major emphasis are stated. If the course is cross-listed (also offered under another course number) a "Same As" statement will be included in the description. If the course is eligible to be repeated for degree credit more than once, a statement will appear to indicate the total hours or times a course may be repeated. If no repeated statement is listed, the course may be used for degree credit only once.

Requisites: Requisites are requirements that must be fulfilled either before a course may be taken or at the same time a course is taken. It is the student's responsibility to make sure the proper prerequisites have been completed before enrolling in any class. Prerequisites are courses or requirements that must be completed prior to enrolling in a certain course. Courses may have prerequisites from inside and outside the department. It is the student's responsibility to make sure he/she has completed the proper prerequisites before enrolling in any class. Courses listed as corequisites are to be taken in the same semester as the course desired.

A course listed as both a pre- and corequisite are requirements that if not taken prior to enrolling in a course, must be taken during the same semester as the course.

Students may not enroll in courses for which they do not have the necessary requisites. Students who are in doubt concerning their eligibility to enroll in specific courses should consult with their academic adviser. Students may be dropped from courses for which they do not have the necessary requisites.
ACCT3723 Intermediate Accounting I (Sp, Fa) This course is designed to study the theoretical basis for financial accounting concepts as they relate to financial reporting. This course emphasizes research and interpreting of financial reports and their implications for accounting and financial decision-making. Overview of the income tax treatment of corporations including advanced tax issues. Introduction to tax research including the organization and authority of tax law; accessing and using the tax law; and, applying law to taxpayer scenarios. Prerequisite: ACCT 3843 or equivalent with a grade of "C" or better.

ACCT6883 Independent Study (Sp, Fa) In-depth coverage of the tax treatment of pass-through business entities including advanced tax issues. Overview of the income tax treatment of estates and trusts. Overview of the essentials of estate and gift taxation. Prerequisite: MBAD 512V or ACCT 3843 each with a grade of "C" or better.

ACCT5953 Auditing Standards (Fa, Sp) Professional aspects of financial statement auditing and reviewed auditors. Includes ethical and legal responsibilities, auditing concepts, critical evaluation of evidence; application of sampling; and auditing problems. Prerequisite: ACCT 4963 with a grade of "C" or better.

ACCT1003 Research Accounting Seminar I (Irregular) First course in the accounting research seminar sequence which explores and evaluates current accounting literature. Course content reflects recent developments in the literature and specific interests of participants. Examples of potential topics include research methods in accounting, managerial accounting, behavioral accounting, tax, audit, international accounting, and education. Prerequisite: ACCT 6033.

ACCT2623 Accounting Research Seminar III (Irregular) Third course in the accounting research seminar sequence which explores and evaluates current accounting literature. Course content reflects recent developments in the literature and specific interests of participants. Examples of potential topics include research methods in accounting, financial accounting, managerial accounting, behavioral accounting, tax, audit, international accounting, and education. Prerequisite: ACCT 6033.

ACCT363V Special Problems in Accounting (Sp, Fa) (1-6) Special research project under supervision of a graduate faculty member.

ACCT4433 Accounting Research Seminar IV (Irregular) Fourth course in the accounting research seminar sequence which explores and evaluates current accounting literature. Course content reflects recent developments in the literature and specific interests of participants. Examples of potential topics include research methods in accounting, financial accounting, managerial accounting, behavioral accounting, tax, audit, international accounting, and education. Prerequisite: ACCT 6033.

ACCT6933 Accounting Research Seminar V (Irregular) Fifth course in the accounting research seminar sequence which explores and evaluates current accounting literature. Course content reflects recent developments in the literature and specific interests of participants. Examples of potential topics include research methods in accounting, financial accounting, managerial accounting, behavioral accounting, tax, audit, international accounting, and education. Prerequisite: ACCT 6033.

ACCT7700V Doctoral Dissertation (Sp, Fa) (1-18) Prerequisite: Candidacy.

Course Descriptions

ADLL6113 Advanced Adult Learning Theory (Irregular) Advanced study of theories and models of adult and lifelong learning with an emphasis on current trends, recent research, and issues affecting the field. Issues covered will include critical theoretical and advancements in neuroscience and cognition as they relate to adult learning and lifespan development.

ADLL6033 Accounting Research Seminar I (Irregular) First course in the accounting research seminar sequence which explores and evaluates current accounting literature. Course content reflects recent developments in the literature and specific interests of participants. Examples of potential topics include research methods in accounting, financial accounting, managerial accounting, behavioral accounting, tax, audit, international accounting, and education. Prerequisite: ACCT 6033.

ADLL5123 Leadership and Ethics in Adult and Lifelong Learning (Irregular) This doctoral seminar explores the leadership principles and ethical considerations that are critical to developing and sustaining adult education programs that benefit individuals, organizations, and communities. Course content includes current research, analysis and lectures from scholar-practitioners from the field.

ADLL5113 Advanced Adult Learning Theory (Irregular) Advanced study of theories and models of adult and lifelong learning with an emphasis on current trends, recent research, and issues affecting the field. Issues covered will include critical theoretical and advancements in neuroscience and cognition as they relate to adult learning and lifespan development.

ADLL6123 Leadership and Ethics in Adult and Lifelong Learning (Irregular) This doctoral seminar explores the leadership principles and ethical considerations that are critical to developing and sustaining adult education programs that benefit individuals, organizations, and communities. Course content includes current research, analysis and lectures from scholar-practitioners from the field.

ADLL5133 Analysis of International Adult and Lifelong Programs (Irregular) Survey of the historical and philosophical events which have shaped adult and lifelong learning. Overview of trends affecting education with an emphasis on the role of policy and public governance in adult and lifelong learning. Discussion of the impact of political ideologies on both the domestic and international stages of adult and lifelong learning. Evaluation of the roles and responsibilities of various organizations in the field. Review of trends and current issues related to policy and public governance of adult and lifelong learning. Prerequisite: MBAD 512V or ACCT 3843 each with a grade of "C" or better.
Course Descriptions

ADLL1713 Current Issues (Irregular) Exploration and dis- cussion of current issues relative to adult education and life long learning. Includes a review of applied research as it relates to practice. May be repeated for up to 6 hours of degree credit.

ADLL3313 Independent Study (Irregular) Independent study may be selected as a college Ambassador before enrolling. May be repeated for up to 6 hours of degree credit.

ADLL4433 Qualitative Reasoning in Adult and Lifelong Learning (Irregular) Methodologies for designing descriptive, correlational, and experimental studies. Development of research questions, definition of variables, selection or development of instruments, data collection, analysis, interpretation and reporting of research results. Prerequisite: ESRM 6403 or equivalent.

ADLL5401 Qualitative Reasoning in Adult and Lifelong Learning (Irregular) Methodologies for designing qualitative research studies in adult and lifelong learning settings. Selection of the appropriate qualitative technique, selection of research subjects, development of data collection protocols, field work strategies, data analysis, data interpretation and presentation of data results.

ADLL4433 Program Evaluation (irregular) Overview of evaluation strategies in adult and lifelong learning programs that include: development of evaluation questions, selection or development of instrumentation, data collection methods, data analysis, and reporting of evaluation results. Emphasis on planning and conducting research associated with evaluation pro- cesses. Prerequisite: ESRM 6403 or equivalent.

ADLL4443 Adult and Lifelong Learning Dissertation Seminar Development of dissertation proposal. Formation of research team, development of methodologies, development of problem statement, research questions, and identification of research variables, constructs of phenomena. Identification of data collection and data analysis procedures. Prerequisite: ESRM 6403 and ADLL 6314.


AFLS1011 The Foundations of the United States Air Force I (Fa) A survey course designed to introduce cadets to the United States Air Force and Air Force Reserve Officer Train- ing Corps. Topics include: mission and organization of the Air Force, leadership and management situations. Corequisite: Lab component.

AERO1011 The Foundations of the United States Air Force I (Fa) A survey course designed to introduce cadets to the United States Air Force and Air Force Reserve Officer Train- ing Corps. Topics include: mission and organization of the Air Force, leadership and management situations. Corequisite: Lab component.


AERO2021 The Evolution of Air and Space Power II (Sp) A historical survey of air and space power, from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Historical examples illustrate the develop- ment of Air Force capabilities and missions. Additional topics: Principles of War and Tenets of Air and Space Power. Leadership Lab mandatory for cadets. Corequisite: Lab component.

AERO300V Study Abroad (Sp, Su, Fa) (1-24) Open to un- dergraduate students studying abroad in officially sanctioned programs. Study abroad may include summer internships, specialized courses abroad, directed individual or group study abroad trips of one-to-four weeks duration. May be repeated for up to 24 hours of degree credit.

AFLS3131H Honors Management and Leadership (Fa) Leadership styles and principles and organizational systems as they relate to professional situations. Recitation 3 hours per week for the first 5 weeks of the semester. Prerequisite: Junior standing.

AFLS3211H Honors Professional Development (Irregular) Professional networking, communication skills, and group dy- namics as they relate to research, teaching, and extension. Recitation 3 hours per week for 5 weeks.

AFLS3231HH Thinking & Methods - Logic, Reasoning, & Sci. Argumentation (Fa) A course to introduce students to general patterns of scientific thinking, and methods of scientific evaluation and conclusion building through group discussions, directed individual or group study exercises of one-to-four weeks duration. May be repeated for up to 24 hours of degree credit.

AFLS3313H Honors Global Issues in AFLS (Irregular) The course offers students the opportunity to increase their under- standing of global issues related to AFLS. The course is open to all students, but first priority will be given to AFLS Honors Students. A mandatory tour will be scheduled during Spring Break. Recitation: Honors Program. Prerequisite: In- structor permission. May be repeated for credit.

AFLS3412H Honors Proposal Development (Sp) This course offers a synthesis level learning opportunity. Course topics will include project proposals, ethics, proposal writing, literature review, experimental design, scientific theory and methods, data collection, statistics, budget, and summary. Students will draw on their background and presentations to create written proposals. Three AFLS lab per week for 10 weeks. Prerequisite: Junior or senior standing.

AFLS3512H Honors Rotations in Agricultural Laboratory Research (Sp) A laboratory course to introduce students to current agricultural and life sciences. Hands-on laboratory exercises will emphasize current cellular and molecular research techniques, laboratory notebook keeping, data interpretation, and presentation of re- sults. Hours: 4 for course. Prerequisite: BIOL 1545 or equivalent.

AFLS400VH Honors Thesis (Sp, Su, Fa) (1-6) May be re- peated for up to 6 hours of degree credit.

AFLS4501H Honors Special Topics (Irregular) (1-3) Studies of selected topics not covered in other courses. Must be in the Honors program to register for this course. May be repeated for up to 6 hours of degree credit.

AFLS4541HH Honors Exploring Ethics (Fa) Exploring issues relevant to human deeds in plants, animals, and environment. Issues to be addressed include the sanctity of life issues, the role of mass media in the modern world and the responsibility of individuals as professionals. Recitation 3 hours per week for the second 5 weeks of the semester.

AFLS5000V Study Abroad (irregular) (1-6) Open to graduate students studying abroad in officially sanctioned programs. May include coursework, internships, special topics, and/or directed individual or group study abroad. May be repeated for up to 24 hours of degree credit.

AGME1011 Principles of Agricultural Microeconomics (Sp, Fa) Introduction to agricultural economics, including a survey of the role and characteristics of agriculture businesses in our economic system. Basic economic concepts concerning price determination, profit maximization, demand, supply, demand and sup- pression. The use of economic principles as applied to the production and marketing decisions made by managers of agri- cultural firms is demonstrated. Credit will be allowed for only one of AGEC 2103 or ECON 2013H. Prerequisite: ECON 1103 or ECON 2013. Pre- corequisite: MATH 1203. (Same as ECON 2023)

AGEC2103 Principles of Agricultural Macroeconomics (Sp, Fa) Applications of economic principles to problems of agri- culture, distribution, and price flexibility. Analysis of the interrelationship between agriculture and other seg- ments of the economy; and the dynamic forces in the economy which affect agriculture. Credit will be allowed for only one of AGEC 2103 and ECON 2031H or AGEC 2103H. Prereq- uisite: AGEC 2103.

AGEC2141L Agribusiness Financial Records Lab (Fa) A computer lab section for the AGEC 2142 Agribusiness Fi- nancial Records class is required to teach students account- ing software and spreadsheet applications related to financial record keeping. Corequisite: AGEC 2142. Prerequisite: AGME 2903 or WOCB 1120 and AGEC 1103 or ECON 2023 or ECON 2143.

AGEC2142 Agribusiness Financial Records (Fa) Principles of small agricultural business management accounting prac- tices are taught to allow students to gain hands-on experience with financial record keeping for a business. Resulting finan- cial statements are analyzed and recommendations are made for enhancing financial efficiency. Corequisite: AGEC 2141 Lab. Prerequisite: AGME 2903 or WOCB 1120 and AGEC 1103 or ECON 2023 or ECON 2143.

AGEC2174 Introduction to Agribusiness (Su) Introduction to agribusiness issues as they relate to the food processing, wholesale and retail sectors of the agricultural industry. Cover- age of methods and tools agribusiness managers use to evalu- ate business opportunities. Case studies serve to communi- cate concepts of product distribution, design, promotion and pricing in the development of a marketing plan. Prerequisite: AGEC 1103 or ECON 2023.

AGEC2403 Quantitative Tools for Agribusiness (Sp) Intro- duction to quantitative methods used in agricultural economics and agribusiness with an emphasis on skills and techniques that will enhance the ability of students to perform in upper division coursework. Provides an overview of statistical and optimization methods used in research problems, economic theory, and applied decision making activities. Prerequisite: AGEC 1103 or ECON 2143, and MATH 2053.

AFLS4503 Food and Agricultural Marketing (Fa) Surveys consumer trends in food markets and the marketing activities of the food and fiber system. Emphasizes marketing concepts for both commodities and differentiated food products. Topics include integration, demand, price, market structure, consumer behavior, marketing management, and current agricultural marketing topics. Prerequisite: AGEC 1103 or ECON 2023 or ECON 2143.

AFLS5000V Agriculture Management (Irregular) (1-6) Open to undergraduate students studying abroad in officially sanctioned programs. May include coursework, internships, special topics, and/or directed individual or group study abroad. May be repeated for up to 24 hours of degree credit.

Agricultural Economics (AGEC)
AGEC3313 Agricultural Business Management (Fa) The planning, organizing, leading and controlling functions of management as they relate to agricultural business firms. Marketing of value-added products, budgeting, organizational structure, cost control, financial statements, capital budgeting and employee supervision and motivation. Case studies and exercises. Prerequisites: AGEC 2142/AGEC 2141 or equivalent, AGEC 2303 or equivalent, and senior standing is recommended.

AGEC3323 Agricultural Entrepreneurship (Sp) Agribusiness entrepreneurship is the process of bringing food or rural-based products and services from conceptualization to market. The course presents the opportunities, problems and constraints that agribusiness 1st. firms face. Emphasis is given to the use of marketing tools, strategies and procedures whereby agricultural firms acquire and utilize funds to meet the needs of growth.

AGEC3403 Futures and Options Markets (Sp) Explanations of hedging strategies for grain farmers, country elevators, soybean crushers, poultry farmers, etc. Use of these options markets in the development of firm level strategies within the constraints facing individuals and firms operating in rural or isolated environments. Exploration of the uses of and the limitations to hedging and cross hedging strategies for grain farmers, country elevators, soybean crushers, poultry firms, etc. Spreadsheets and statistical techniques are used to develop optimal hedging ratios. Prerequisite: AGEC 3373 or consent of instructor.

AGEC4613 Domestic and International Agricultural Policy (Sp) Theory and techniques for predicting price behavior of general commodities. Legal and institutional arrangements for the marketing and marketing channels of food and agricultural products. Farm, international trade, resource, technology, food marketing, and consumer policies analyzed. Prerequisite: AGEC 1103 or ECON 2023 and AGEC 2103 or ECON 2013 and (ECON 2013 or ECON 2023 or ECON 2024) or AGST 4023 or AGST 4024 or AGST 4026 or STAT 2303 or WCOB 1033. (Same as ECON 5613)

AGEC5733 Bioenergy Economics and Sustainability (Fa) This course will provide an understanding of the economic issues relating to overall supply chains producing bioenergy and bio-based products. The course will address the economic, social, and environmental dimensions of these industries. Prerequisites: AGED 600V Master’s Thesis (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing.

AGEC700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy.

AGEC4373 Basis Trading: Applied Price Risk Management (Sp) Students design and implement hedging and cross hedging strategies for grain farmers, country elevators, soybean crushers, poultry firms, etc. Spreadsheets and statistical techniques are used to develop optimal hedging ratios. Prerequisite: AGEC 3373 or consent of instructor.

AGEC5133 Agricultural and Environmental Resource Economics (Sp) Examination of the economic, social, and ecological constraints facing individuals and firms operating in rural or isolated environments. Emphasis is given to the use of marketing tools, strategies and procedures whereby agricultural firms acquire and utilize funds to meet the needs of growth.

AGEC5413 Agribusiness Strategy (Sp) Examines the development of firm level strategies within the constraints facing individuals and firms operating in rural or isolated environments. Exploration of the uses of and the limitations to hedging and cross hedging strategies for grain farmers, country elevators, soybean crushers, poultry firms, etc. Spreadsheets and statistical techniques are used to develop optimal hedging ratios. Prerequisite: Graduate standing.

AGEC5733 Bioenergy Economics and Sustainability (Fa) This course will provide an understanding of the economic issues relating to overall supply chains producing bioenergy and bio-based products. The course will address the economic, social, and environmental dimensions of these industries. Prerequisites: AGED 600V Master’s Thesis (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing.
Course Descriptions

AGME1611L Fundamentals of Agricultural Systems Technology Laboratory (Fa) Study of basic mathematical and physical science concepts important in the mechanization of agriculture. Laboratory required for agricultural education, communication and technology majors enrolled in AGME 1613, optional for others enrolled in AGME 1613. Corequisite: AGME 1613.

AGME1613 Fundamentals of Agricultural Systems Technology (Fa) Introduction to basic physical concepts important in agricultural systems: applied mechanics, power and machinery management, structures and electrodynamics, and soil and water conservation. Lecture 3 hours per week. Corequisite: AGME 1611L (for AECT Majors).

AGME2123 Metals and Welding (Sp, Fa) An introduction to agricultural mechanics shop work to include hot and cold arc welding, and plasma arc cutting. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component.

AGME2903 Agricultural and Human Environmental Sciences Applications of Microcomputers (Sp, Su, Fa) Lecture and laboratory assignments covering the contemporary use of microcomputers in agricultural research, production, and home economics. Major emphasis placed on learning to use selected, appropriate software packages. Lecture 2 hours per week, laboratory 2 hours per week.

AGME3042 Agricultural Construction Technology (Sp) Principles of building design and construction. Includes site visitation and development of working drawings and bid specifications. Prerequisites: AGME 2302, AGME 2303, and one additional course from AGME 2903, AGME 3003, AGME 3042, or AGME 4103.

AGME3101 Small Power Units/Turf Equipment Laboratory (Sp) Testing, evaluation, and maintenance of engines, hydrostatic power transmission systems, and equipment commonly used in the turf and landscaping industries. Corequisite: AGME 3102. Prerequisite: MATH 1203.

AGME3102 Small Power Units/Turf Equipment (Sp) Principles of operation, adjustment, repair, maintenance, and trouble shooting of small air-cooled or liquid-cooled engines and power units, including various engine systems, service and maintenance of turf equipment and machinery. Lecture 2 hours per week. Corequisite: AGME 3101L. Prerequisite: MATH 1203.

AGME3513 Surveying in Agriculture and Forestry (Fa) Techniques and procedures normally used in determining arable areas and characterizing the topography of agricultural and for- est lands. Includes basic concepts of surveying; use and care of level, transit, distance measuring equipment; topographic mapping and public land surveys. Lecture and laboratory 6 hours per week. Prerequisite: MATH 1203.

AGME3517 Electricity in Agriculture (Sp) Principles of electricity and the design and use of agricultural structures; selection of electric motors and their care and application in the broad field of agriculture; lighting and special uses of electricity such as heating and electrical controls. Lecture 2 hours, laboratory 2 hours per week. Corequisite: Lab component. Prerequisite: Math 1203.

AGME400V Special Topics (Sp, Su, Fa) (1-6) Individual study or research in electrodynamics, and power units. May be repeated for credit.

AGME402V Special Topics in Agricultural Mechanization (Irregular) (1-4) Topics not covered in other courses or a more intensive study of specific topics in agricultural mechanization. May be repeated for credit.

AGME403V Special Topics (Sp, Su) (1-6) Individual study or research in advanced hydrostatic power transmission systems, and equipment. May be repeated for credit.

AGME405V Special Topics (Sp, Su, Fa) (1-6) Individual study or research in electrodynamics, and power units. May be repeated for credit.

AGME4091 Independent Study in Agricultural Education (Sp) (1-6) Independent study or research in agricultural education. May be repeated for credit.

AGME4141 Electronic Communications in Agriculture (Even years, Fa) An overview of communication technology in the agricultural, food and life sciences.

AGME4232 Program Development (Sp) Principles and concepts of leadership, program organization, supervised agri- cultural experience, and advisory committees. This course is a portion of pre-professional studies required for certification in agricultural education. Prerequisite: AGED 3313. (Same as AGED 4232)

AGME4243 Graphic Design in AFLS (Sp, Su, Fa) This course provides students with graphic design and software skills spe- cific to industries in Agriculture, Food, and Life Sciences. Students will learn to use industry-standard software (InDesign, Photoshop, Illustrator, Microsoft Excel, etc.) to prepare text and graphics and package them for use in print production. Prerequisite: AGME 2903.

AGME4343 Communication Campaigns in Agriculture (Even years, Fa) Students will develop understanding of the principles, practices and applications of social marketing, inte- grated marketing communication, advertising and public rela- tions as they pertain to developing communication campaign strategies for the agricultural industry. Students will develop a communication campaign for an agricultural company and/or entity focused on a specific product or service. Prerequisite: Senior or Graduate status.

AGME4443 Principles of Technological Change (Odd years, Fa) This course introduces a structured approach for dealing with the organizational and human aspects of technol- ogy transition, including the key concepts of resistance and change management, organization, communicative processes, and processes by which professional change agents influence the introduction, adoption, and diffusion of technolo- gical change. This course may be offered as a web-based course. Prerequisite: Junior status.

AGME4543 Ag Publications (Even years, Sp) Students produce a magazine through classroom study mirroring a pro- fessional magazine staff and are provided an opportunity for their writing, advertisements, photographs and artwork to be published in the magazine. By using computer applications, students integrate various skills including writing, editing, and layout in agricultural publications. Prerequisite: JOUR 1033.

AGME4632 Teaching Diverse Populations in Agricultural and Extension Education (Sp) This course is designed to provide students with an understanding of teaching diverse populations as applied to problems of practice in agricultural and extension education.

AGME473V Internship in Agricultural Education (Sp, Su, Fa) (1-6) Sched- uled practical experiences supervised by the director and the student. Prerequisite: Admission into Clinical Practice. May be repeated for up to 6 hours of degree credit.

AGME4843 Methods in Agricultural Laboratories (Sp) Methods and management techniques in all types of agri- cultural laboratories that may be in a secondary agricultural science program. Emphasis on management of students and facilities, equipment, and materials. Lecture 2 hours, labora- tory 4 hours per week. Prerequisite: AGME 2192.

AGME5001 Seminar (Sp) Presentations and discussion of graduate student research as well as review of current litera- ture and topics of current interest by students and faculty. All graduate students in the program are required to attend. Prerequisite: Graduate status.

AGME5013 Advanced Methods in Agricultural Mechanics (Odd years, Su) Emphasis on shop organization and manage- ment, courses, unit shop instruction, and development of skills in mechanical practice. Prerequisite: Graduate status.

AGME5033 Developing Leadership in Agricultural Organiza- tions (Fall) Organizational concepts of leadership, adminis- trative styles and structures; leadership for boards, commit- tees, governmental bodies, and review of societal and political environments. Prerequisite: Graduate status.

AGME5053 Philosophy of Agricultural and Extension Education (Even years, Sp) An examination and analysis of social and economic events leading to the establishment and development of agriculture and human environmental sciences in agricultural education programs. Lecture 3 hours per week. Prerequisite: Graduate standing.

AGME510V Special Problems (Sp, Su, Fa) (1-6) Individual study or research in agricultural education. May be repeated for credit.

AGME520V Special Topics in Agricultural and Extension Education (Irregular) (1-4) Topics not covered in other courses or a more intensive study of specific topics in agriculture education. Prerequisite: Graduate standing. May be repeated for credit.

AGME5363 Educational Delivery Techniques (Irregular) Students will learn to apply teaching and learning theory in the development of engaging instruction delivered through elec- tronic media. The goal of the course is not to make experts in the field of e-learning, but to prepare students with the knowledge/practical skills necessary to deliver curriculum through various methods. Prerequisite: Graduate standing.

AGME5463 Research Methodology in the Social Sciences (Sp) Logical structure and the method of science. Basic ele- ments of research design; observation, measurement, analytic method, interpretation, verification, presentation of results. Ap- plications to research in economic or sociological problems of particular interest in agriculture and human sciences. Prerequisite: Graduate standing. (Same as HESC 5463)

AGME5473 Interpreting Social Data in Agriculture (Fa) The development of competencies in analyzing, interpreting and communicating social data and information to a broad audience in agriculturally related professions. Students will select ap- propriate analysis techniques and procedures for various problems, analyze data, and interpret and report the results of statistical analyses. Prerequisites: AGME 4203 or EDFD 5393 and AGED 5463 or RSOC 5463.

AGME5483 Technical Communication in the Social Sci- ences (Odd years, Sp) This course will provide students with the basic principles and techniques in communicating social science information relevant to human subject research in agri- culture, natural resources, and life sciences to the general public. Communication processes covered in the course in- clude group discussion, presentation, writing, editing, and publication of social science-based materials for popular and refereed publications. Focus will also be placed on thesis preparation and writing and research manuscript development and dis- semination of social science research. Web-delivered course. Prerequisite: Graduate standing.

AGME550V College Teaching in Agricultural Related Disciplines (Irregular) (1-3) For students who are pursuing graduate study in teacher education for teaching at the post-secondary level, but who also may desire or expect to teach. Provides theory and practice in planning and executing a college-level course.

AGME607V Internship in Agricultural Education (Sp, Su, Fa) (1-6) Sched- uled practical field experiences under supervision of a professional practitioner in off-campus secondary school systems. Emphasis includes classroom preparation, teaching, and student evaluation. Prerequisite: Admission into Clinical Agricultural Mechanization (AGST)

AGST4011 SAS Programming (Sp, Su) SAS programming language introduction to basic SAS concepts and applications with emphasis on the reading and restructuring of data files, and the displaying of data in tabular and graphic forms. The course is taught using a hands-on approach.
Course Descriptions

AGST4023 Principles of Experimentation (Fa) Fundamental
concepts of experimental and statistical methods as applied to
agricultural research. Lecture 3 hours per week. Prerequisite:
MATH 1203 or higher level.
AGST500V Special Problems (Sp, Su, Fa) (1-6) Individual
investigation of a special problem in some area of statistics
applicable to the agricultural, food, environmental, and life sciences not available under existing courses. May be repeated
for up to 6 hours of degree credit.
AGST5014 Experimental Design (Sp) Types of experimental
designs, their analysis and application to agricultural research.
Lecture 3 hours and laboratory 2 hours per week. Corequisite:
Lab component. Prerequisite: AGST 4011 and (AGST 4023 or
STAT 4003).
AGST504V Special Topics (Irregular) (1-4) Topics not covered in other courses or a broader-based study of specific
topics in statistics and related areas. Prerequisite: Graduate
standing. May be repeated for credit.
AGST5713 Applied Regression Analysis for Agricultural
Sciences (Fa) Analysis of agricultural experiments which contain quantitative factors through regression procedures. Lecture 3 hours per week. Prerequisite: AGST 4011 and (AGST
4023 or STAT 4003).
AGST5803 Case Studies in Biometry (Irregular) Nonstandard statistical problems arising in the agricultural, food,
environmental, and life sciences. Prerequisite: STAT 5113 and
STAT 5313 and either AGST 5014 or STAT 4373.
AGST5901 Statistical Consulting Process (Sp) Examines
the components of statistical consulting with emphasis on the
interpersonal aspects.
AGST5913 Statistical Consulting Practicum (Irregular)
Supervised statistical consulting. Prerequisite: STAT 5313 and
AGST 5901 and either (AGST 5014 or STAT 4373).
Asian Studies (AIST)
AIST4003 Asian Studies Colloquium (Fa) An interdepartmental colloquium with an annual change of subject, required
of students in the Asian studies program. Prerequisite: Sophomore standing. May be repeated for up to 6 hours of degree
credit.
AIST4003H Honors Asian Studies Colloquium (Fa) An interdepartmental colloquium with an annual change of subject,
required of students in the Asian studies program. Prerequisite: sophomore standing. May be repeated for up to 6 hours
of degree credit.
American Studies (AMST)
AMST2003 Introduction to American Studies (Fa) Introduction to American Studies as an interdisciplinary field of study.
Examination of a selected topic from various methodological
perspectives.
Animal Science (ANSC)
ANSC1001L Introductory to Animal Sciences Laboratory
(Fa) Study of facilities used in production, processing, and
management in animal agriculture. Identification, selection
evaluation and testing of livestock, meat, and milk. Laboratory
3 hours per week.
ANSC1032 Introductory Animal Sciences (Fa) Students will
be introduced to biological sciences associated with modern
systems of care and management of livestock. Foundation
sciences include topics in genetics, growth and development,
physiology, nutrition, animal health, and animal behavior.
Course will meet M, T, W, and R for the first eight weeks of
the fall semester.
ANSC1041 Introduction to Companion Animal Industry
(Fa) The importance of companion animals and their allied industries will be discussed. Application of scientific principles to
the care and management of companion animals, specifically
dogs, cats and horses, will be emphasized. Course will meet
on T and R during the second eight weeks of the fall semester.
ANSC1051 Introduction to the Livestock Industry (Fa) The
importance of livestock and their allied industries will be discussed. Application of scientific principles to the care and management of livestock, specifically beef and dairy cattle, swine,
sheep, and goats will be emphasized. Course will meet on M
and W during the second eight weeks of the fall semester.
ANSC1062 Sustainable Integrated Small Animal Farming
(Sp) Practical information on small scale animal production,
including practical strategies for farm planning, issues of economic and environmental sustainability, best management
practices, biosecurity, disease prevention, and farm safety will
be presented. (Same as POSC 1062)
ANSC2003 Introduction to Equine Industry (Sp) Examina-

University of Arkansas, Fayetteville

tion of careers and business opportunities in the equine industry. Students will gain the opportunity to identify high quality
horses through evaluation of conformation and locomotion.
Students will also gain skill at oral presentation and be knowledgeable of costs and responsibilities associated with horse
ownership.
ANSC2213 Behavior of Domestic Animals (Fa) Behavior
associated with domestication. Effects of selective breeding,
physical and social environments, and developmental stage
on social organization, aggressive behavior, sexual behavior,
productivity, and training of domestic animals.
ANSC2252L Introduction to Livestock and Meat Evaluation (Sp) Develop an understanding between live animal
evaluation and carcass composition. Comparative judging
including meat evaluation, classification and selection of beef
cattle, sheep and swine.
ANSC2304 Equine Behavior and Training (Fa) Psychology
and ethology of equine social behavior and how it pertains to
learning patterns. Application of fundamental behavioral concepts to training of horses. Students will apply classical, practical, and proven equine training techniques to achieve safe,
less-traumatic learning for the horse and trainer. Lecture two
hours and laboratory six hours per week. Prerequisite: Instructor consent.
ANSC2781 Career Preparation and Development (Fa) The
importance of preparing for a career in the animal sciences
and industries will be covered.
ANSC3003 Applied Animal Parasitology (Odd years, Sp)
The economically important parasites of domestic animals
with emphasis on their host relationships and management
considerations. Lecture 2 hours, laboratory 2 hours per week.
Corequisite: Lab component.
ANSC3013 Parasitisms of Domesticated Non-Herbivores
(Even years, Sp) Course will provide applied instruction and
appreciation for the parasitisms of our domesticated swine,
chickens, turkeys, dogs and cats.
ANSC3032 Animal Physiology I (Fa) Fundamental aspects
of neural/muscle/bone tissues and the cardiovascular system.
The normal structure and functions of these systems will be
emphasized. Lecture 2 hours per week. Prerequisite: BIOL
1543 and (CHEM 1123 or CHEM 1073). (Same as POSC
3032)
ANSC3042 Animal Physiology II (Sp) Fundamental aspects
of renal, respiratory, digestive, and endocrine physiology will
be covered. The normal structure and function of these systems will be emphasized. Lecture 2 hours per week. Prerequisite: BIOL 1543 and CHEM 1123 or CHEM 1073. (Same as
POSC 3042)
ANSC3123 Principles of Genetics (Fa) Fundamentals of
heredity, with special emphasis on the improvement of farm
animals. Lecture 3 hours per week. Prerequisite: BIOL 1543
and MATH 1203 or higher. (Same as POSC 3123)
ANSC3133 Animal Breeding and Genetics (Sp) Application
of the principles of genetics to the breeding of farm animals.
Lecture 3 hours per week. Prerequisite: ANSC 1032 and
MATH 1203.
ANSC3143 Principles of Animal Nutrition (Sp) Scientific approach to animal nutrition involving the mechanisms through
which feed nutrients are utilized by farm animals. Lecture 3
hours per week. Prerequisite: CHEM 1073 and CHEM 1071L
or CHEM 1123 or CHEM 1121L.
ANSC3151L Applied Animal Nutrition Laboratory (Fa)
Practical approach to animal nutrition; use of various methods
of feedstuff evaluation and ration balancing for domestic animals. Laboratory 2 hours per week. Corequisite: ANSC 3152.
Prerequisite: ANSC 3143 and MATH 1203.
ANSC3152 Applied Animal Nutrition (Fa) Practical approach
to animal nutrition; physical and chemical composition of feedstuffs, feed processing and preparation, nutrient interactions,
and application of nutritional principles to feeding domestic
animals. Lecture 2 hours per week. Corequisite: ANSC 3151L.
Prerequisite: ANSC 3143 and MATH 1203.
ANSC3282 Livestock Judging and Selection (Fa) Comparative judging, including grading, classification, and selection of
beef cattle, swine, sheep and horses. Oral and written discussion. Laboratory 6 hours per week. Prerequisite: ANSC 1032
or ANSC 2252L.
ANSC3291 Livestock Junior Judging Team Activity (Sp)
Training for membership on judging teams, through participation.
ANSC3333 Diseases of Livestock (Sp) Introductory study of
the diseases of farm animals with emphasis on fundamental
principles of disease, body defense mechanisms, hygiene,
and sanitation. Corequisite: Lab component. Prerequisite:
BIOL 1543.
ANSC3433 Fundamentals of Reproductive Physiology

(Fa) Principles of mammalian reproductive physiology with
emphasis on farm animals. Lecture 3 hours per week. Prerequisite: ANSC 1032 and BIOL 1543.
ANSC3491L Artificial Insemination in Cattle (Sp) Experience with artificial insemination technique in cattle including
estrus detection, semen storage and handling, insemination
equipment maintenance and technique. Laboratory 4 hours
per week. The course is offered the second 8 weeks of the
spring semester. Prerequisite: ANSC 3433 or instructor consent.
ANSC3613 Meat Science (Fa) The study of meat science
and muscle biology. Topics will include animal/tissue growth
and development and the relationship to meat quality. Meat
processing, preservation, and meat safety concerns will also
be considered. Lecture 3 hours per week. Prerequisite: CHEM
2613 or CHEM 3603.
ANSC3723 Horse and Livestock Merchandising (Fa) Various types of merchandising programs for specific livestock
enterprises will be presented. Students will evaluate the effectiveness of merchandising programs including how to
organize, advertise, and manage a purebred auction sale of
livestock.
ANSC3822 Equine Law (Odd years, Fa) Horse ownership
presents unusual, if not unique, legal issues. This course examines the basic underpinnings of commercial transactions in
horses, tort liability, business structure, environmental law and
gaming regulation.
ANSC400V Special Problems (Sp, Su, Fa) (1-6) Special
problems in the animal sciences for advanced undergraduate
students. May be repeated for up to 6 hours of degree credit.
ANSC401V Internship in Animal Sciences (Sp, Su, Fa) (1-6)
Supervised work experience with private or government organizations Prerequisite: Junior standing. May be repeated for up
to 6 hours of degree credit.
ANSC410V Special Topics in Animal Sciences (Irregular)
(1-4) Topics not covered in other courses or a more intensive
study of specific topics in animal sciences. Prerequisite: ANSC
1032. May be repeated for credit.
ANSC4252 Cow-Calf Management (Fa) Systems of cow-calf
management including the practical application of the principles of breeding, feeding, and management to commercial
and purebred beef cattle under Arkansas conditions. Lecture
1 hour and laboratory 2 hours per week. Pre- or Corequisite: ANSC 1041 or ANSC 1051 and CHEM2613/2611L or
CHEM3603/3601L and ANSC 1001L and ANSC 2252L and
ANSC 2781 and COMM 1313 and BIOL 2013 and BIOL 2011L
ANSC4262 Swine Production (Even years, Fa) Methods
in producing purebred and commercial swine with specific
emphasis on the management programs needed for profitable pork production in Arkansas. Lecture 1 hour, laboratory 2
hours per week. Corequisite: Lab component. Pre- or Corequisite: ANSC 1041 or ANSC 1051 and ANSC 1001L and ANSC
2252L and ANSC 2781 and COMM 1313 and BIOL 2013 and
BIOL 2011L and CHEM 2613 and CHEM 2611L.
ANSC4272 Sheep Production (Odd years, Sp) Purebred
and commercial sheep management emphasizing the programs of major importance in lamb and wool production in
Arkansas. Pre- or Corequisite: ANSC 1041 or ANSC 1051 and
CHEM2613/2611L or CHEM3603/3601L and ANSC 1001L
and ANSC 2252L and ANSC 2781 and COMM 1313 and BIOL
2013 and BIOL 2011L.
ANSC4283 Horse Production (Sp) Production, use and
care of horses and ponies including breeding, feeding, handling, and management. Lecture 2 hours, laboratory 3 hours
per week. Corequisite: Lab component. Pre- or Corequisite: ANSC 1041 or ANSC 1051 and CHEM2613/2611L or
CHEM3603/3601L and ANSC 1001L and ANSC 2252L and
ANSC 2781 and COMM 1313 and BIOL 2013 and BIOL 2011L
ANSC4291 Livestock Senior Judging Team Activity (Fa)
Training for membership on judging teams, through participation.
ANSC4452 Milk Production (Sp) Principles of breeding,
feeding, and management of dairy cattle will be reviewed,
and course will include field trip touring dairy industry. Pre- or
Corequisite: ANSC 1041 or ANSC 1051 and CHEM2613/2611L
or CHEM3603/3601L and ANSC 1001L and ANSC 2252L and
ANSC 2781 and COMM 1313 and BIOL 2013 and BIOL 2011L.
ANSC4482 Companion Animal Management (Fa) The study
and application of principles of domestication, nutrition, reproduction, parasitology, diseases, behavior, and husbandry
management to companion animals. Dogs, cats, and exotic animals will be the species of primary interest. Practical
problems of care and management of these species will be
solved. Prerequisite: BIOL 1543 or equivalent or consent of
instructor. Pre- or Corequisite: ANSC 1041 or ANSC 1051 and
CHEM2613/2611L or CHEM3603/3601L and ANSC 1001L

313


of heart function and excitation, and blood vessel mechanisms. Prerequisite: POSC/ANSC 3032 and POSC/ANSC 3042, or Corequisite: ANSC 3032 and BIOL 2013 and BIOL 2011L.

ANSC423 Brain & Behavior (Fa) Course covers cellular through neural systems, major brain functions and comparative neuroanatomy between mammals and birds. Specific topics include brain structures, ion channels, membrane potential function, action potentials, synaptic integration, neurotransmitters, major brain regions of mammals and birds, sensory systems and the autonomic nervous system. Lecture 3 hours. Corequisite: Drill component. Pre- or Corequisite: CHEM 3813. Corequisite: POSC/ANSC 3032 and POSC/ANSC 3042. (Same as POSC 3832)

ANSC5942 Endocrine Physiology of Domestic Animals (Fa) Endocrine physiology, including mechanisms of hormone formation, secretion and association with the endocrine system will be discussed for domestic animals and poultry. Lecture 3 hours; drill 1 hour per week (for first 8 weeks of semester). Pre- or Corequisite: CHEM 3813. Corequisite: Drill component. Prerequisite: POSC/ANSC 3032 and POSC/ANSC 3042. (Same as POSC 3832)

ANSC5952 Respiratory Physiology of Domestic Animals (Sp) Respiratory physiology, including mechanisms of lung function, ventilation, and the interaction of the respiratory system with other bodily systems in domestic animals and poultry will be discussed. Lecture 3 hours; drill 1 hour per week for first 8 weeks of semester. Pre- or Corequisite: CHEM 3813. Corequisite: Drill component. Prerequisite: POSC/ANSC 3032 and POSC/ANSC 3042. (Same as POSC 3832)

ANSC6143 Minerals in Animal Nutrition (Odd years, Sp) Advanced study of the genetic basis of variation and the genetic interpretation with substantive worldwide examples. Corequisite: ANTH 3143.ENGL 3143

ANSC6833 Reproduction in Domestic Animals (Even years, Sp) Comprehensive review of current theory of reproductive function in domestic animals. Lecture 3 hours per week. Pre-requisite: ANSC 3143 (or POSC 3433) and CHEM 3813. (Same as CHEM 3143)

ANSC6838 Reproduction in Domestic Animals (Odd years, Sp) Comprehensive review of current theory of reproductive function in domestic animals. Lecture 3 hours per week. Pre-requisite: ANSC 3143 (or POSC 3433) and CHEM 3813. (Same as ANSC 3833)

ANTH1023L Archeology Laboratory (Sp, Su) Laboratory exercises illustrating concepts of archeology. Corequisite: ANTH 3023

ANTH2213L Honors Introduction to Cultural Anthropol- ogy (Sp, Fa) Introduction to the nature of culture and its influence on human behavior and personality: comparative study of custom, social organization, and processes of change and integration of culture. (Same as ANTH 1011L)

ANTH1011L Honors Introduction to Cultural Anthropology (Sp, Fa) Elementary introduction to the nature of culture and its influence on human behavior and personality: comparative study of custom, social organization, and processes of change and integration of culture. (Same as ANTH 1011L)

ANTH103D Honors Introduction to Cultural Anthropol- ogy (Sp, Fa) Introduction to the nature of culture and its influence on human behavior and personality: comparative study of custom, social organization, and processes of change and integration of culture. (Same as ANTH 1011L)

ANTH2013 Introduction to Latin American Studies (Ir- regular) This course provides an interdisciplinary introduc- tion to Latin America. Drawing on Latin American literature, history, anthropology, and political science, the course examines the broad forces that have shaped the region. (Same as LAST 2013)

ANTH2003 World Prehistory (Irregular) Survey of the pre-history and early historic cultures of the Americas, Asia, and Africa.

ANTH2021L Archeology Laboratory (Sp, Su) Laboratory exercises illustrating concepts of archeology. Corequisite: ANTH 3023

ANTH3023 Approaches to Archeology (Sp, Fa) Study of the field of archeology including method, theory, analysis and inter- pretation with substantive worldwide examples. Corequisite: ANTH 2023

ANTH3033 Egyptology (Irregular) Explores multiple aspects of Ancient Egyptian civilization including chronology, art, reli- gion, literature and daily life. Prerequisite: Junior standing.

ANTH3143 Language and Expressive Culture (Irregu- lar) This course explores the complex interrelationship of language, culture, and social identity. Verbal art and expres- sive culture are examined from a variety of anthropological perspectives. Topics include ethnographies of speaking, dis- course and social relations. Corequisite: ANTH 3143.ENGL 3143

ANTH3163 Male and Female: A Cultural and Biological Overview (Fa) A comparative approach to understand the role of female in roles in culture in relation to human biology and socialization.

ANTH3173 Introduction to Linguistics (Irregular) Intro- duction to language study with stress upon modern linguistic theory and analysis. Data drawn from various languages re- veal linguistic universals as well as phonological, syntactic, and semantic systems of individual languages. Related top- ics: language history, dialectology, language and its relation to society, the human condition, and language and social relationships. Prerequisite: Junior standing. (Same as COMM 3173,ENGL 3173,WLLC 3173)

ANTH2521 Indians of North America (Irregular) Study of the cultures of the Americas, from prehistory up to the present, with a focus on Native American lifeways at early White contact and subsequent acculturation.

ANTH2523 Cultures of the South (Sp) Survey of the diverse ethnic and racial groups of the American South with special emphasis on social and cultural traits related to contemporary developments. (Same as PLSC 3273,SOCI 3253)

ANTH2526 Indians of Arkansas and the South (Odd years, Sp) Study of the traditional lifeways and prehistoric back- grounds of Indians living in the Southern United States, includ- ing Arkansas.

ANTH3421L Human Osteology Laboratory (Sp) Laboratory exercises illustrating concepts of human osteology. Corequi- site: ANTH 3421


ANTH3433 Human Evolution (Fa) A study of hominid evolu- tion from origin to the present, including trends in comparative and functional development of human form as a result of cultural and biological interaction.

ANTH3443 Criminalistics: Forensic Sciences (Irregular) Introduction to forensic science focused on the scientific analysis of physical and biological evidence encountered in criminal investigations. Chemical, microscopic, biological, and obser- vational techniques employed in the analysis of material evi- dence are described, discussed, and illustrated within an in-
ANTH2436 Identity and Culture in the U.S.-Mexico Borderlands (Irregular) An exploration of the interplay between language, race, class, and ethnicity in the U.S.-Mexico border. Course examines identity formation, hybridity, social tension, marginalization, race, and gender, as an anthropological perspective, paying special attention to the border as theoretical construct as well as material reality.

ANTH3453 Laboratory Methods in Archeology (Irregular) Theory and practice of describing, analyzing, and reporting archeological materials.

ANTH3463 Museums, Material Culture, and Popular Imagination (Fa) Museums as ideological sites and thus as sites of potential contestation produce cultural and moral systems concerning the past and communities. This course will focus on strategies of representation and the continuous process of negotiating social and cultural hierarchies with and through objects that are displayed.

ANTH4443 Cultural Resource Management I (Sp) Concentrated discussion of management problems relative to cultural resources, including review and interpretation of relevant federal legislation, research vs. planning needs, public involvement and sponsor planning, and assessment of resources relative to scientific needs. No field training involved; discussion will deal only with administrative, legal and scientific management problems. May be repeated for credit.

ANTH448V Indian Reasoning: Ecological Anthropology (Sp, Su, Fa) (1-6) Reading course for advanced students with special interests in anthropology. May be repeated for up to 6 hours of degree credit.

ANTH4513 African Religions: Gods, Witches, Ancestors (Irregular) An exploration of African religions from a variety of anthropological perspectives, exploring how religious experience is perceived and interpreted by adherents, highlighting the ways in which cultural and group identities are constructed, maintained, and contested within religious contexts. Readings reflect the vast diversity of religious life in Africa.

ANTH4523 Dental Science (Fa) Introduction to the study of human dentition including anatomy, morphology, growth and development, and histology.

ANTH4533 Middle East Cultures (Sp) Study of the peoples and cultures of the Middle East: ecology, economy, economics, social organization, genealogical patterns and historical continuity, and the influence of social change. May be repeated for up to 9 hours of degree credit.

ANTH4553 Introduction to Raster GIS (Fa) Theory, data structures, algorithms, and techniques behind raster-based geographical information systems. Through laboratory exercises and lectures multidisciplinary applications are examined in database creation, remotely sensed data handling, elevation models, and remote sensing of public and private land. The course will also deal with administrative, legal and scientific management problems. May be repeated for up to 9 hours of degree credit.

ANTH4653 Advanced Raster GIS (Irregular) Advanced raster topics are examined in beginning with a theoretical and methodological review of Tomlin’s cartographic modeling principles. Topics vary and include Fourier methods, image processing, kriging, spatial statistics, principal component analysis, fuzzy and regression modeling, and multi-criteria decision models. Several raster GIS programs are examined with links to statistical analysis software. Prerequisite: ANTH 4553 or GEOG 4553.

ANTH4813 Ethnographic Approaches to the Past (Irregular) Review of the uses of ethnographic data in the reconstruction and interpretation of past cultures and cultural processes, with particular emphasis on the relationships between modern theories of culture and archeological interpretation.

ANTH4843 Quantitative Anthropology (Irregular) Introductory statistics course for anthropology students examining probability theory, nature of anthropological data, data graphics, descriptive statistics, probability distributions, test for means and variances, categorical and rank methods, ANOVA, correlation and regression. Lectures focus on theory; students utilize anthropological data and a statistical software laboratory. (Same as GEOS 4843.)

ANTH4903 Seminar in Anthropology (Irregular) Research, discussion, and projects focusing on a variety of topics. May be repeated for up to 12 hours of degree credit.

ANTH4913 Topics of the Middle East (Irregular) Covers a special topic or issue. May be repeated for up to 9 hours of degree credit.

ANTH5413 Bioarcheology Seminar (Odd years, Sp) Advanced Problems in Anthropology (Sp, Su, Fa) (1-18) Individual research at graduate level on clearly defined problems or problem areas. May be repeated for up to 18 hours of degree credit.

ANTH5433 Advanced Vector Geographic Information Systems (Irregular) Advanced vector operations and analysis. Topics will include topological analysis, network analysis, geocoding, conflations, implications of source and product map data, geocoding, error mapping, and cartographic production. Prerequisite: (ANTH 4553 or GEOS 4553) or equivalent. (Same as GEOS 5033)

ANTH5503 Quaternary Environments (Fa) An interdisciplinary study of the Quaternary Period including dating methods, environments, deposits, soils, climates, tectonics, and human adaptation. Lecture 2 hours, laboratory 2 hours per week. (Same as ENGY 5003, GEOS 5003.)

ANTH5833 Applications of Cultural Method and Theory (Fa) Review of the nature and history of cultural anthropology; recent theories and practical implications and applications of various methods of acquiring, analyzing and interpreting cultural data.

ANTH5833 Anthropology of the City (Irregular) Examines cities as both products of culture, and sites where culture is made and received. Explores the implications of several pivotal shifts in cultural trends: the growth of the urban and rural size of the city, the impact of cultural representations of the city have informed dominant ideas about city space, function, and feel.

ANTH5835 Topics in Anthropology (Irregular) Graduate level seminar with varied emphasis on topics relating to cultural anthropology. May be repeated for credit.

ANTH5843 Applications of Archeological Method and Theory (Fa) Review of the nature and history of archeology; recent theories and practical implications and applications of various methods of acquiring, analyzing, and interpreting archeological data.

ANTH5853 Indians of Arkansas and the South (Odd years, Sp) Study of the traditional lifeways and prehistoric backgrounds of Indians living in the southern United States, including Arkansas.

ANTH5853 Applications of Method and Theory in Biological Anthropology (Irregular) Review of the nature and history of biological anthropology; recent theories and the practical implications and applications of various methods of acquiring, analyzing, and interpreting biological data.

ANTH5863 Indians of Arkansas and the Border (Odd years, Sp) Study of the traditional lifeways and prehistoric backgrounds of Indians living in the southern United States, including Arkansas.

ANTH5863 Archeological Research Methods and Archaeological Practice (Irregular) Review of the nature and history of biological anthropology; recent theories and the practical implications and applications of various methods of acquiring, analyzing, and interpreting biological data.

ANTH5913 Topics in Prehistoric Archaeology (Irregular) (1-6) Graduate level seminar with varied emphasis on topics relating to physical anthropology. May be repeated for credit.

ANTH5923 Bioarchaeology Seminar (Odd years, Sp) Interdisciplinary study of the biological anthropology of humans. Lecture and laboratory. Prerequisite: ANTH 5043 and 5413.

ANTH6256 Archeological Field School (Su) Practical field and laboratory experiences in archeological research. May be repeated for up to 12 hours of degree credit.

ANTH6263 Archeological Prospecting & Remote Sensing (Irregular) Ground-based geophysical, aerial, and other remote sensing methods are examined for detecting, mapping, and investigating archaeological materials and other deposits. These methods include magnetometry, resistivity, conductivity, radar, aerial photography, thermography, and multi-channel scanning. Requires computer skills, field trips, and use of instruments.

ANTH6264 Archaeological Research Methods and Practices (Irregular) Advanced raster topics are examined in beginning with a theoretical and methodological review of Tomlin’s cartographic modeling principles. Topics vary and include Fourier methods, image processing, kriging, spatial statistics, principal component analysis, fuzzy and regression modeling, and multi-criteria decision models. Several raster GIS programs are examined with links to statistical analysis software. Prerequisite: ANTH 4553 or GEOG 4553.

ANTH6413 Primate Adaptation and Evolution (Sp) Introduction to the biology of the order Primates. This course will consider primate adaptation and the paleontology of our nearest living relatives. Prerequisite: ANTH 1013 (or BIOL 1543 and BIOL 1541L). (Same as BIOL 4613)

ANTH6433 Archeological Prospecting & Remote Sensing (Irregular) Ground-based geophysical, aerial, and other remote sensing methods are examined for detecting, mapping, and investigating archaeological materials and other deposits. These methods include magnetometry, resistivity, conductivity, radar, aerial photography, thermography, and multi-channel scanning. Requires computer skills, field trips, and use of instruments.

ANTH6443 Archeological Research Methods and Practices (Irregular) Advanced raster topics are examined in beginning with a theoretical and methodological review of Tomlin’s cartographic modeling principles. Topics vary and include Fourier methods, image processing, kriging, spatial statistics, principal component analysis, fuzzy and regression modeling, and multi-criteria decision models. Several raster GIS programs are examined with links to statistical analysis software. Prerequisite: ANTH 4553 or GEOG 4553.
ARCH1013H Honors Diversity and Design (Fa) 
Explores the reciprocal relationship between diversity and design in America, investigating how race, gender, religion, ability, age, class, and location affect and are affected by the design of media, products, architecture, and cities/regions. Positive and negative effects of diversity and design are discussed. Prerequisite: Honors candidacy.

ARCH1101V Internship (Sp, Su) 1-18 
May be repeated for credit. (Same as ENDY 6033)

ARCH1102V Internship (Sp, Su) 1-18 
May be repeated for credit.

ARCH1015 Architectural Design I (Sp, Fa) 
A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Corequisite: Architectural Lecture (Fa) A general introduction to architecture, exploring the designed environment, including cities and building...
Overview of the emergence, growth and trends that define the significant texts and the discernment of concepts embedded

ARCH4483H Honors Architecture of the Americas (Irregular)

The city is exposed to the visual arts. Lectures on theory and criticism, demonstrations, films, and slides. Three hours a week plus attendance at specified programs and exhibits. May not be presented toward satisfaction of the B.A. fine arts requirement by art majors.

ARCH5026H Honors Thesis Project II (Sp, Fa)

Investigation into the practical, theoretical, and methodological activities involving the school and community. Prerequisite: ARED 2913.

Course Descriptions

ARHS1003 Basic Course in the Arts: Art Lecture (Sp, Su)

Study of Early Christian, Byzantine, Early Medieval, Romanesque, and Gothic styles. Prerequisite: ARHS 2913 or ARCH 4433. (Same as ARCH 4853)

ARHS4813 The History of Photography (Irregular)

Study of the evolution of a commanding Western architectural tradition with close attention to the social, humanistic, and religious contexts that produced it. Prerequisite: ARCH 4433. (Same as ARCH 4753)

ARHS4743 Medieval Architecture (Irregular)

Survey of art works in the visual arts of Mesopotamia, Egypt, Greece, or Rome’s urban form and historical and theoretical information in support of the students’ experience. Includes site visits and lectures. Offered in a semester or in a single session. Prerequisite: ARCH 4026 or ARCH 4116 or ARCH 4126.

ARCH4161 Architectural Design I (Reg)

A practicum which introduces and engages the student in the practice and application of the profession. Prerequisite: completion of all three year program requirements, 2.5 minimum GPA and completion of the three courses listed below. Prerequisite: ARCH 4653.

ARCH4553H Honors Modern Architecture in Mexico (Su)

Overview of the emergence, growth and trends that define the ongoing evolution of modern architecture in Mexico from the first decades of the 20th century to contemporary practice. Offered in the Mexico City study abroad semester.

ARCH4610 Architecture Cooperative Education I (Irregular)

A praxis practice which introduces and engages the student in the practice and application of the profession. Prerequisite: completion of all three year program requirements, 2.5 minimum GPA and completion of the three courses listed below. Prerequisite: ARCH 4653.
Course Descriptions

Arts and Sciences (ARSC)

ARSC1001 Fullbright Perspectives (I, Sp) Open to incoming freshman and transfer students participating in the university’s First Year Experience. Available for credit only.

ARSC300V Study Abroad (Sp, Su, Fa) (1-14) Open to undergraduate students studying abroad in officially sanctioned programs. May be repeated for up to 24 hours of degree credit.

ARSC310V Cooperative Education (Sp, Su, Fa) (1-4) Required of participating students. Prerequisites vary by placement. Available for credit only. May be repeated for up to 4 hours of degree credit.

ARSC500V Study Abroad (Sp, Su, Fa) (1-6) Open to graduate students studying in participating programs. May be repeated for up to 24 hours of degree credit.

ARSC6943 Seminar: Critical Thought in Art (Fa) Prerequisite: ARHS 2923.

ARSC6933 Graduate Research In Art History (Irregular) Prerequisite: ARHS 2923 or graduate Art MFA standing. May be repeated for up to 6 hours of degree credit.

ARSC6933H Honors Graduate Research In Art History (Irregular) Prerequisite: ARHS 2923 or graduate Art MFA standing. May be repeated for up to 6 hours of degree credit.

ARSC7103 Reading Room (Arts & Sciences) (1-6) May be repeated for up to 6 hours of degree credit.

ARSC8913 20th Century Art to 1860 (Irregular) The visual arts in the United States from the onset of the American Civil War through 1860. Prerequisite: ARHS 2923.

ARSC8913H Honors 20th Century Art to 1860 (Irregular) The visual arts in the United States from the onset of the American Civil War through 1860. Prerequisite: ARHS 2923.

ARSC8923 Classical Art and Architecture (Irregular) Study of significant works of art and architecture. Prerequisite: ARHS 2923.

ARSC9493 Seminar in Art Criticism (Fa) Prerequisite: 9 hours of art history.

ARTS1013 Drawing Fundamentals I (Sp, Fa) Prerequisite: ARTS 1313 and (ARTS 2003 or ARTS 2013). May be repeated for up to 6 hours of degree credit.

ARTS1023 Three-Dimensional Design I (Sp, Fa) Prerequisite: ARTS 1323.

ARTS1033 Three-Dimensional Design II (Sp, Fa) Prerequisite: ARTS 1023 and ARTS 2013.

ARTS1313 Three-Dimensional Design (Sp, Fa) Studio problems in the use of line, shape, texture, value, and color and their relationships.

ARTS1323 Three-Dimensional Design (Sp, Fa) Studio problems with the elements of three-dimensional design: structure, space, form, surface, and their relationships.

ARTS2003 Drawing Fundamentals II (Sp) Continuation of drawing fundamentals. Prerequisite: ARTS 1013.

ARTS2013 Three-Dimensional Applications in Art (Sp, Fa) Introduction to digital imaging in the visual arts. Beginning instruction in digital image creation, manipulation and processing. Introduces input and output peripherals, computer graphic software programs and work in the digital visual arts. Prerequisite: ARTS 1313.

ARTS2303 Drawing III (Fa) Advanced studies and problems in drawing techniques and materials. Prerequisite: ARTS 2013 and ARTS 2023.

ARTS3013 Painting I (Sp, Fa) An exploration of different ways of articulating visual forms on a picture plane, using common materials and procedures. Prerequisite: ARTS 1313 and ARTS 1323 or ARTS 2313.

ARTS3123 Painting: Water Media (Irregular) Introductory course presenting basic materials and techniques of watercolor, gouache, and acrylic painting. Form and composition are to be studied through observation and imagination. Traditional techniques as well as experimentation and personal expression are to be explored. Prerequisite: ARTS 1013 and ARTS 1313 and ARTS 1323.

ARTS3133 Figure Painting (Irregular) Introduction to representational and interpretive figure painting and to contemporary issues in figurative painting. The model as well as other visual sources will be utilized in a basic figure observation, interpretation and invention. Prerequisite: ARTS 1013, ARTS 1313, and ARTS 1323.

ARTS3153 Painting Perception Into Abstraction (Irregular) Investigation of the abstraction of visual phenomena. Various starting points and approaches will be studied. Emphasis on the analysis of form, the creation of pictorial structure, and the conceptual basis of perceptual abstraction. Prerequisite: ARTS 3103.

ARTS3225 Sculpture I: Fundamentals of Modeling, Carving & Casting (Fa) An introduction to fundamental additive and subtractive sculpture techniques and methods of seeing and working that give expression to material form. Beginning techniques in modeling, carving, mold-making, and basic casting are demonstrated, and critiques will develop student awareness of traditional building techniques which inform contemporary sculpture practices. Prerequisite: ARTS 1323.

ARTS3231 Sculpture II: Construction Methods & Alternative Media (Sp) A focus on material sensitivity through thoughtful and skillful additive approaches. Woodworking as well as techniques in alternative media are introduced as tools to examine structural and spatial possibilities. Through examining and questioning the interplay of form, material, technique, and content, students will further develop their own critical and creative processes. Prerequisite: ARTS 1323.

ARTS3333 Color Studies (Fa) Investigation of color qualities and relationships through research and studio problems. Prerequisite: ARTS 1313 and ARTS 1323 and ARTS 2013.

ARTS404V Special Problems in Painting (Sp, Su, Fa) (1-6) Individual projects in drawing arranged with the instructor. Prerequisite: ARTS 2032. May be repeated for up to 6 hours of degree credit.

ARTS4133 Landscape Painting (Irregular) Exploration of perceptual and conceptual approaches to painting the landscape. Both traditional and experimental techniques of oil painting will be studied. Includes outdoor-on-site painting. Prerequisite: ARTS 3103.

ARTS4153 Topics in Advanced Painting (Irregular) Topics in advanced and experimental painting. Prerequisite: ARTS 3103. May be repeated for up to 6 hours of degree credit.

ARTS417V Special Problems in Painting (Sp, Fa, Su) (1-6) Individual projects in painting and subject areas are arranged with the instructor. Prerequisite: ARTS 4143. May be repeated for up to 6 hours of degree credit.

ARTS4193 Senior Painting Studio (Irregular) Intensive studio course in advanced painting. Specific art major concentrations in painting. Extended, individually determined projects will emphasize production of a well researched, conceptually grounded and cohesive body of work. Suplemented by reading, writing and discus-
ARTS4213 Applied Media & Spatial Context (Irregular) An exploration in assemblage, installation, environment, art, light, and kinetics as they apply to contemporary sculptural language. Specific problems utilizing various media are pre-ceded by readings, lectures, and demonstrations. Prerequisite: ARTS 2213 and ARTS 2215.

ARTS4223 Advanced Sculpture (Irregular) A directed analysis of form and its relationship to content based on the development of work in students’ medium of choice. Students will access the technical skills needed to meet personal vision through direction of the instructor. Research evidenced in work, discussions, and critiques is emphasized. Prerequisite: ARTS 3203 and ARTS 3213.

ARTS432V Special Problems in Sculpture (Sp, Fa) (1-6) Individual projects in sculpture with emphasis on materials exploration. Prerequisite: ARTS 4223. May be repeated for up to 8 hours of degree credit.

ARTS4333 Bookmaking (Irregular) Introduction to the creation of unique, limited edition artist’s bookworks – with emphasis on technical knowledge and conceptual understanding of the book form as a means of artistic expression. Prerequisite: ARTS 3363. Studio problems in the interrelationships of two and three-dimensional elements in traditional, experimental, and digital media. Prerequisite: ARTS 1313 and ARTS 1323 and ARTS 2313.

ARTS435V Special Problems in Design (Irregular) (1-6) Extended problems in an area of interest in pure or functional design; encouraged use of imaginative materials. Prerequisite: ARTS 4343. May be repeated for up to 6 hours of degree credit.

ARTS4363 Visual Design: Typographic (Fa) Studies include type as form, typographic contrast principles, legibility, text organization and hierarchy, and experimental approaches to typographic design. Overview of typographic history is included. Current computer software applications utilized. Prerequisite: ARTS 3363.


ARTS4383 Graphic Design: Layout (Irregular) Advanced explorations of organizational principles and design processes applied to print media. Contemporary design practices and graphic design history are studied. Current computer software applications utilized. Prerequisite: ARTS 3363.

ARTS439V Special Problems in Graphic Design (Sp, Fa) (1-6) Advanced individual projects in graphic design. Prerequisite: Any 4000 level ARTS visual design course except ARTS 4343. May be repeated for up to 6 hours of degree credit.

ARTS4463 Etching III (Sp, Fa) (1-6) Individual projects on an advanced level. Prerequisite: ARTS 4453. May be repeated for up to 6 hours of degree credit.

ARTS484V Special Problems in Photography (Sp, Fa) (1-6) Individual assignment of advanced undergraduate and graduate students in photography designed by students in collaboration with faculty. Prerequisite: ARTS 3803 and (ARTS 3813 or ARTS 4823 or ARTS 4833). May be repeated for up to 6 hours of degree credit.

ARTS4883 Drawing (Irregular) Introduction to color production. Color materials, techniques and theory. Direct reversal transparencies and prints, color negative processing and printing, and manipulation of color materials. Assignments, demonstrations, critiques, and lectures. Prerequisite: ARTS 3803.

ARTS4883 Advanced Black and White Photography (Irregular) Advanced black and white photography practice, technique and practices including: Zone System, large format camera and studio lighting. Prerequisite: ARTS 3803.

ARTS484V Special Problems in Photography (Sp, Fa) (1-6) Individual assignment of advanced undergraduate and graduate students in photography designed by students in collaboration with faculty. Prerequisite: ARTS 3803 and (ARTS 3813 or ARTS 4823 or ARTS 4833). May be repeated for up to 6 hours of degree credit.

ARTS5013 Graduate Drawing (Fa) Problems in drawing materials and techniques. Prerequisite: Admission to MFA program. May be repeated for credit.

ARTS5023 Graduate Drawing I (Fa) (1-6) Fundamental drawing principles and techniques. Prerequisite: Graduate standing. May be repeated for credit.

ARTS5051V Master of Fine Arts Exhibition (Sp, Fa) (1-6) Production and presentation of a one person exhibition of art work. The M.F.A. candidate will be responsible for making three acceptable slide sets of the exhibition and exhibition statements. Prerequisite: M.F.A. candidacy.

ARTS5062V Graduate Drawing (Sp, Fa) (1-6) Individual problems in drawing techniques. Prerequisite: Graduate standing. May be repeated for credit.

ARTS5822V Graduate Sculpture (Sp, Fa) (1-6) Individual problems in sculpture techniques. Prerequisite: Graduate standing. May be repeated for credit.

ARTS6242 Graduate Printmaking (Sp, Fa) (1-6) Individual problems in printmaking techniques. Prerequisite: Graduate standing. May be repeated for credit.

ARTS6532V Graduate Design (Sp, Fa) (1-6) Individual problems in design techniques. Prerequisite: Graduate standing. May be repeated for credit.

ARTS682V Graduate Photography (Sp, Fa) (1-6) Individual problems in photography. Prerequisite: Graduate standing. May be repeated for credit.

ARTS685V Graduate Photography I (Sp, Fa) (1-6) Individual problems in photography. Prerequisite: Graduate standing. May be repeated for credit.

ASTR4013 Astrophysics (Even years, Sp) Prerequisite: PHYS 2074 and PHYS 2031L or PHYS 2033. Basic concepts of the universe, including information about the solar system, the Sun, normal stars and interstellar medium, birth and death of stars, neutron stars, pulsars, and black holes. Prerequisite: PHYS 2001M. May be repeated for up to 3 hours of degree credit.

ASTR2001M Honors Survey of the Universe Laboratory (Fa) An introduction to the content and fundamental properties of the cosmos. Topics include planets and other objects of the solar system, the Sun, normal stars and interstellar medium, birth and death of stars, neutron stars, pulsars, black holes, the Galaxy, clusters of galaxies, and cosmology. Corequisite: ASTR 2001L or ASTR 2003H. (Same as ASTR 2001M).

ASTR2001L Survey of the Universe Laboratory (Sp, Su, Fr) A lab which provides nighttime and daytime observations of the cosmos using small telescopes and in-door exercises on selected topics. Pre- or Corequisite: ASTR 2003.

ASTR2003 Survey of the Universe (Sp, Su, Fr) An introduction to the content and fundamental properties of the cosmos. Topics include planets and other objects of the solar system, the Sun, normal stars and interstellar medium, birth and death of stars, neutron stars, pulsars, black holes, the Galaxy, clusters of galaxies, and cosmology. Corequisite: ASTR 2001M. May be repeated for up to 3 hours of degree credit.

ASTR201V Observational Astronomy (Irregular) (1-3) Individual experimental or observational problems studied with small telescopes, cameras, and other basic equipment. No credit is offered toward a B.S. degree in physics. Prerequisite: ASTR 2003 or ASTR 2003H.

ASTR2033 Solar System Astronomy (Irregular) Basic course on state of knowledge of solar system astronomy, es-pecially those planets of the solar system that are in an orbit such that they can be observed with small telescopes. May be repeated for up to 6 hours of degree credit.

ASTR2043 Astrophysics (Even years, Sp) Introduction to course Descriptions
ATHR5212 Athletic Training Clinical I - Application of Athletic Preventive Devices (Su) This course will serve as an introduction to the athletic training clinical program. Procedures and policies of the clinical program and application of athletic prevention devices will be covered as well. Prerequisite: Admission to the graduate program in athletic training.

ATHR5222 Athletic Training Clinical II - Emergency Procedures (Su) This course will serve as a process for monitoring student's progression of athletic training competencies, acquire clinical hours under the direct supervision of a certified athletic trainer, and reinforce and instruct new emergency procedures. Prerequisite: ATHR 5212.

ATHR5242 Athletic Training Clinical IV - Evaluation of Upper Extremity (Sp) This course will serve as a process for monitoring student's progression of athletic training competencies, acquire clinical hours under the direct supervision of a certified athletic trainer, and reinforce and instruct upper extremity evaluation. Prerequisite: ATHR 5222.

ATHR5252 Athletic Training Clinical IV (Su) This course will serve as a process for monitoring student’s progression of athletic training competencies and, acquisition of clinical hours under the direct supervision of a training clinical instructor during pre-season conditioning program. Prerequisite: MATH 5202.

ATHR5262 Athletic Training Clinical VI - Rehabilitation Lab (Fa) This course will serve as a process for monitoring student's progression of athletic training competencies, acquire clinical hours under the direct supervision of a certified athletic trainer, and reinforce and instruct rehabilitation lab. Prerequisite: ATHR 5252.

BENG1012 Biological Engineering Design Fundamentals (Sp) This course provides the tools needed to perform biological engineering design including a definition, and demonstration through field trips, guest speakers, examples of job opportunities and internships. Basic engineering methodologies, including analyzing systems; math and statistics applications to problem solving, data analysis, report writing, presentations, and engineering recordkeeping. Group activities and team design efforts. Lecture 1 hour, laboratory 3 hours per week. Corequisite: BIOL 1012.

BENG1022 Biological Engineering Design Studio I (Ir) Practical approaches to biological engineering design, including design of production and processing systems with reference to a computer-aided graphics package. Lecture 1 hour, laboratory 3 hours per week. Corequisite: BIOL 1012 or GNEG 1103. Corequisite: Lab component.

BENG2612 Biological Engineering Design Studio II (Fa) Applications of biology, chemistry and physics to the design of life support for enclosed biological systems involving people, animals, plants and microbes. Design process will be based upon engineering analyses such as quantifying bio-energetics needs, material/labor cost, and using computer software and use of wastewater modeling tools. Students will be presented multiple design modules that include literature/experimental discovery, open-ended design and prototype testing. 4 hours of design studio per week. Corequisite: BIOL 2534/2531L. Prerequisite: BIOL 2534/2531L. Corequisite: Lab component.

BENG2622 Biological Engineering Design Studio III (Sp) Continuation of BENG 2612. Design experience involves considering design projects for use in designing systems interfacing with biological systems. Design process will include discussion of social issues and ethics, use of engineering economics as a tool to evaluate design alternatives. Use of descriptive statistics and regression to analyze experimental data. Improved written and oral communication skills through presentation of design project results. 4 hours of design studio per week. Pre- or Corequisite: GNEG 1112 or GNEG 1103, BIOL 2013/2011L or BIOL 2533/2531L. Prerequisite: BENG 2612.

BENG2632 Biological Engineering Design Studio (Fa) Application of the engineering design process to projects involving living systems. Projects are team-based open-ended design with hands-on construction and testing of design prototypes. Emphasis is placed on understanding, quantifying and controlling complex interacting living systems involving humans, animals, plants and microbes with the goal of creating economically and ecologically sustainable designs. 4 hours of design studio per week. Pre- or Corequisite: PHYS 2054 and BIOL 1543/1541L, and (GNEG 1111 or GNEG 1103).

BENG2643 Biological Engineering Methods (Sp) This course presents engineering methods necessary for biological engineering design, integrated through projects in the food, energy and/or water area. The tools covered include structured programming language for modeling, statistical analysis, geographic information systems and computer-aided graphics for biological engineering economics. Two hours of lecture and three hours of lab per week. Corequisite: Lab component. Prerequisite: BENG 2632.

BENG3104 Electronic Instrumentation for Biological Systems (Sp) Theory and advanced applications of analog circuits, digital circuits, and commercial instruments involving biological materials and systems. Lecture 3 hours per week, laboratory 3 hours per week. Prerequisite: PHYS 2074.

BENG3104H Honors Electronic Instrumentation for Biological Systems (Sp) Theory and advanced applications of analog circuits, digital circuits, and commercial instruments involving biological materials and systems. Lecture 3 hours per week, laboratory 3 hours per week. Prerequisite: PHYS 2074.

BENG3213 Biomedical Engineering: Emerging Methods and Applications (Sp) Introductory course for undergraduate biomedical engineering students. Emerging biomedical engineering topics including: tissue engineering, stem cell engineering, biomedical nanotechnology, medical imaging and imaging and single molecule imaging and spectroscopy, biomechanics, bioinformatics and proteomics, gene therapy, drug delivery, and protein engineering. Design of components for tissue engineering processes, nanodrug delivery and nanotechnology based disease detection. Lecture 3 hours per week. Pre- or Corequisite: BENG 3723. Prerequisite: BIOL 2533/2531L or BIOL 2033/2031L.

BENG3653 Global Bio-Energy Engineering (Sp) Global energy sources with a focus on renewable energy, solar, biomass, and wind. Biomass energy production from crops and organic residues or waste products. Conversion of bio- mass to usable fuels. Utilization of renewable energy in society. Includes detailed systems analyses to examine inputs, outputs, and profitability of processes. Introduction to problem solving, data analysis, report writing, presentations, and engineering recordkeeping. Group activities and team design efforts. Lecture 1 hour, laboratory 3 hours per week. Corequisite: BIOL 2533/2531L.

BENG3712 Engineering Properties of Biological Materials (Fa) Measuring and predicting the physical, chemical, and biological properties of biological materials necessary for the design and production of medical devices and implants. Lecture 4 hours. Prerequisite: BENG 2612. Corequisite: BIOL 2533/2531L. Prerequisite: BIOL 2533/2531L. Corequisite: Lab component.

BENG3723 Unit Operations in Biological Engineering (Sp) Design of basic unit operations typical of biological engineering practice; unit operations include pipe-pipe, fan-dust, moist air (psychrometric) processes (cool/heater/humidifier/dryer), air mixing, aeration, and refrigeration; unit operations design will account for unique constraints imposed by biological systems. Prerequisite: BENG2612 and 3 hours and lab 3 hours per week. Pre- or Corequisite: CHEG 2313. Lab component. Prerequisite: (MEEG 2403 or CHEG 2313) and (CHEG 2313 or CHEG 2133 or MEEG 3503).

BENG3733 Transport Phenomena in Biological Systems (Fa) A principal challenge facing modern life sciences is the transfer of energy, mass, momentum, and species between and within biological systems. The course will cover the principles of transport phenomena in one or more of the following contexts: liquids, gases, solids, and complex multiphase systems. Prerequisite: (MEEG 2403 or CHEG 2313) and MATH 2584.

BENG3743 Food and Bio-Product Systems Engineering (Sp) Sustainable bio-product engineering through biobased system science; processes, modeling, concept development, life cycle phases for bio-products (food, fiber, feed, and fuel). System analysis of inputs and outputs of energy, water and mass for the purpose of producing and processing biomass for human uses. Advanced bio-process design topics to utilize enzymes, cells, tissues and organisms to create bio-products and methods for deactivating biological agents to preserve the quality and safety of food and other bio-products. Three hours lecture per week. Prerequisite: BENG 3723 and BENG 3733.

BENG3803 Mechanical Design in Biological Engineering (Sp) Introduction to the mechanical design process applied to biological engineering, with examples of mechanical components interfacing with biological systems. Engineering properties of materials, loading, combined stress analysis, theories of failure. Systems approach in design, including safety, reliability and cost. Lecture 2 hours, laboratory 3 hours per week. Prerequisite: BIOL 1103.

BENG3933 Sustainable Watershed Engineering (Sp) Provides students with expertise in using advanced tools in watershed assessment and modeling. Emphasis is placed on core competencies in hydrology and hydraulics to allow student to evaluate water used by sector in water management regions; evaluate and quantify water demands by sector with emphasis on water management; develop the hydrologic processes, including precipitation, evapo-transportation, infiltration, runoff, and stream flow; quantify and simulate constituent loading to watersheds using GIS-based models, and un-
BENG4113 Risk Analysis for Biological Systems (Odd years, Fa) Principles of risk assessment including exposure assessment, dose response, and risk management. Methods of risk analysis modeling and simulation with computer software. Applications of risk analysis in medical, animal, food and environmental systems. Prerequisite: MATH 2564 and BIOL 2013.

BENG4123 Biosensors & Bioinstrumentation (Odd years, Sp) Principles of biologically based sensing elements and interfacing circuits, focusing on techniques for analysis of biological and environmental systems. Prerequisite: CHEM 3613. Corequisite: Lab component. Prerequisite: BIOL 2533 or BENG 4104.

BENG4133 Digital Remote Sensing and GIS (Irregular) Basic digital remote sensing techniques and geographic information systems applied to monitoring of natural processes and resources. Course topics include introduction to electromagnetic radiation, concept of color, remote sensing systems, and light attenuation in the atmosphere. Prerequisites: CHEM 1013, CHEM 1014, and CHEM 1015. Topics include data models, spectral transforms, spatial transforms, correction and calibration, georectification, and image classification with hyperspectral and multi-spectral images acquired with aerial or satellite sensors. GIS is integrated into the course throughout the semester. Will use software such as ENVI, ArcGIS and ArcView. Lecture 2 hours, lab 3 hours per week.

BENG4143 Biomedical Engineering Principles (Fa) Engineering principles applied to the design and analysis of systems affecting human health. This is an introductory course focusing on fundamentals of physiological systems and modeling. Course topics include introduction and applications of mathematical techniques to biomedical engineering problems. Topics include: brief overview of anatomy and physiology, bioelectric phenomena, physiological modeling, cardiovascular system, biomechanics, and computational biology. Requires a background in calculus and differential equations. Prerequisite: CHEM 1013. Corequisite: Lab component. Prerequisite: BIOL 2533 or BENG 4104.

BENG4223 Numerical Methods in Biomedical Engineering (Sp) Application of mathematical techniques and numerical methods for analyzing biological data and solving biological problems. The emphasis will be computer simulation and mathematical modeling applications in biomedical engineering. Prerequisite: MATH 2584.

BENG4223 Tissue Engineering (Fa) Introduction to tissue engineering. Topics include quantitative cell and tissue biology, tissue dynamics, cellular-fate processes, coordination of cellular-fate processes, stem cell differentiation and organ regeneration, biomaterials and tissue scaffolding, gene therapy, and clinical implementation of tissue engineered products. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisite: CHEM 3613.

BENG4243 Biomaterials (Sp) Study of different classes of biomaterials and their interactions with human tissues. From absorbable sutures to Zirconium alloy hip implants, biomaterials science influences nearly every aspect of medicine. Topics include: biocompatibility factors; natural and synthetic biopolymers, ceramics and metals; orthopedic, dental and cardiovascular implants; ophthalmological and dermatological materials; degradable polymers for drug delivery; nanobiomaterials, smart biomaterials and the regulation of devices and materials by the FDA. Three lectures per week. Prerequisite: (BENG 3712 or MEEG 2103) and MEEG 3013.

BENG4243 Electronic Response of Biological Tissues (Irregular) Understand the electric and magnetic response of biologic tissues to electromagnetic fields. Topics include: frequency response of tissues to electromagnetic fields, time-domain analysis of tissue responses, and models of tissue properties, electromagnetic effects on tissue, and effects of electromagnetic fields on tissue physiology. Lab component. Prerequisite: MATH 3713 and CHEM 3613. Corequisite: BIOL 3503 or CENG 3613.

BENG4253 Biotechnology Engineering (Fa) Design concepts for processes and equipment used in biological, food and agricultural industries. Focus on bioprocessing, biotechnology, and biochemical engineering. Prerequisite: MATH 2584 and BENG 3712. Corequisite: Lab component. Prerequisite: CHEM 3613.

BENG4283 Electronic Response of Biological Tissues (Irregular) Understand the electric and magnetic response of biologic tissues to electromagnetic fields. Topics include: frequency response of tissues to electromagnetic fields, time-domain analysis of tissue responses, and models of tissue properties, electromagnetic effects on tissue, and effects of electromagnetic fields on tissue physiology. Lab component. Prerequisite: MATH 3713 and CHEM 3613. Corequisite: BIOL 3503 or CENG 3613.

BENG4293 Ecological Engineering Design (Fa) Design of low impact, ecologically responsible urban and environmental systems. Topics include: biodegradability metrics, bioremediation techniques, and ecological design techniques. Lab component. Prerequisite: CHEM 3613.

BENG4403 Watershed Eco-Hydraulics (Sp) Engineering principles involved in assessment and management of surface water flow and hydrologic processes. Topics include: basic hydrologic concepts, and the impacts of climate change on hydrologic processes. Lecture 3 hours per week. Corequisite: CHEM 3613.

BENG4403 Watershed Eco-Hydraulics (Sp) Engineering principles involved in assessment and management of surface water flow and hydrologic processes. Topics include: basic hydrologic concepts, and the impacts of climate change on hydrologic processes. Lecture 3 hours per week. Corequisite: CHEM 3613.

BENG4503 Advanced Topics in Biomedical Engineering (Irregular) Topics relate to key issues in biomedical engineering and to emerging challenges. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

BENG5007 Advanced Instrumentation in Biological Engineering (Sp) Physical phenomena, methods, and techniques in instrumentation in biological systems and in biotechnology. Topics include data models, spectral transforms, spatial transforms, correction and calibration, georectification, and image classification with hyperspectral and multi-spectral images acquired with aerial and satellite sensors. GIS is integrated into course throughout the semester. Will use software such as ENVI, ArcGIS, and ArcView. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

BENG5007 Advanced Instrumentation in Biological Engineering (Sp) Physical phenomena, methods, and techniques in instrumentation in biological systems and in biotechnology. Topics include data models, spectral transforms, spatial transforms, correction and calibration, georectification, and image classification with hyperspectral and multi-spectral images acquired with aerial and satellite sensors. GIS is integrated into course throughout the semester. Will use software such as ENVI, ArcGIS, and ArcView. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

BENG5103 Advanced Instrumentation in Biological Engineering (Sp) Physical phenomena, methods, and techniques in instrumentation in biological systems and in biotechnology. Topics include data models, spectral transforms, spatial transforms, correction and calibration, georectification, and image classification with hyperspectral and multi-spectral images acquired with aerial and satellite sensors. GIS is integrated into course throughout the semester. Will use software such as ENVI, ArcGIS, and ArcView. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.
BENG523 Biomedical Engineering Principles (Fa) Engineering principles of the design and application of biomedical systems. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG524 Advanced Biomedical Engineering (Odd years, Sp) Advanced study, evaluation, and application of biomedical engineering principles. Prerequisite: BENG 523.

BENG525 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG526 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG527 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG528 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG529 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG530 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG531 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG532 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG533 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG534 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG535 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG536 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG537 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG538 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG539 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG540 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG541 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG542 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG543 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG544 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG545 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG546 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG547 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG548 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG549 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG550 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG551 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG552 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG553 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG554 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG555 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG556 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG557 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG558 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG559 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG560 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG561 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG562 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG563 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG564 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG565 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG566 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG567 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG568 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG569 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG570 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG571 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG572 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG573 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG574 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG575 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG576 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG577 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG578 Biomedical Engineering Principles (Fa) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG579 Biomedical Engineering Principles (Sp) Principles of biomedical engineering. Prerequisite: consent of instructor. Corequisites: CHEM 1123.

BENG580 Biomedical Engineering Principles (Irregular) Advanced study and application of biomedical engineering principles. Prerequisite: consent of instructor. Corequisites: CHEM 1123.
BIOL211L General Microbiology Laboratory (Sp, Su, Fa) Techniques for handling microorganisms. Does not count towards BS in Biology. Corequisite: BIOL 211L. 

BIOL213 Human Physiology Laboratory (Sp, Su, Fa) 

BIOL221 Principles of General Microbiology Laboratory (Sp, Su, Fa) Techniques for handling microorganisms. Does not count toward BS in Biology. Corequisite: BIOL 221. 

BIOL223 Principles of General Microbiology Laboratory (Sp, Su, Fa) Techniques for handling microorganisms. Does not count toward BS in Biology. Corequisite: BIOL 223. 

BIOL231L General Genetics Laboratory (Fa) Surveys of Mendelian, molecular, and population mechanisms of inheritance and gene expression in prokaryotes and eukaryotes. Lecture 4 hours per week. Prerequisite: BIOL 1543 and BIOL 1541L. Corequisites: CHEM 1073 and CHEM 107L (or CHEM 1103) or (CHEM 1123 and CHEM 1121L) and MATH 1203. 

BIOL232L General Genetics Laboratory (Fa) Surveys of Mendelian, molecular, and population mechanisms of inheritance and gene expression in prokaryotes and eukaryotes. Lecture 4 hours per week. Prerequisite: BIOL 1543 and BIOL 1541L. Corequisites: CHEM 1073 and CHEM 107L (or CHEM 1103) or (CHEM 1123 and CHEM 1121L) and MATH 1203. 

BIOL240L Molecular Cell Biology Lab (Fa) In-depth molecular coverage of cellular processes involved in growth, metabolism, transport, excitation, signaling and motility, with emphasis on function and regulation in eukaryotes, primarily animals. Prerequisite: BIOL 2533 and BIOL 2323 and CHEM 3813 and PHY 1033. 

BIOL243L Molecular Cell Biology Lab (Sp) In-depth molecular coverage of cellular processes involved in growth, metabolism, transport, excitation, signaling and motility, with emphasis on function and regulation in eukaryotes, primarily animals. Prerequisite: BIOL 2533 and BIOL 2323 and CHEM 3813 and PHY 1033. 

BIOL245L Cell Biology Lab (Sp)细胞生物学实验。
BIOL4793 Introduction to Neurobiology (Sp) Ecology, behavior, and physiology of mammals. Two hours laboratory dealing with classification, morphology, distribution, lecture and laboratory by arrangement. Corequisite: Lab component. Prerequisite: BIOL 3023 or ANTH 1613.

BIOL498V Field Ecology (Sp, Su) 1-3 Project oriented approach employing current field and laboratory techniques, experimental design, and data analysis. Field trip is required. Prerequisite: BIOL 3863. (Same as ENBI 498V)

BIOL499V Basic Immunology (Sp, Su) 1-4 Basic principles of design and analysis for population studies of fish and wildlife species. Students will be instructed in the use of the latest software for estimating population parameters. Fundamentals and management approaches will be emphasized. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisite: BIOL 3863.

BIOL5404 Comparative Botany (Odd years, Fa) A comparative view of the major plant groups and their evolution. Prerequisite: BIOL 3023 and BIOL 3323.

BIOL5513 Collection and Identification of Forest Trees (Even years, Fa) A course on identifying and recognizing tree species in the forests of the central and southeastern United States. Prerequisite: BIOL 3023 or equivalent.

BIOL5703 Mechanisms of Pathogenesis (Fa) A survey of the events causing human disease at the molecular, cellular and genetic levels. Seeks to develop an appreciation that both the tricks pathogens use and the body's own defenses contribute to pathology. Prerequisite: BIOL 2533.

BIOL5703H Honors Mechanisms of Pathogenesis (Fa) A survey of the events causing human disease at the molecular, cellular and genetic levels. Seeks to develop an appreciation that both the tricks pathogens use and the body's own defenses contribute to pathology. Prerequisite: BIOL 2533.

BIOL4713 Basic Immunology (Sp) A general overview of the function of immune system with an emphasis on the underlying cellular, molecular, and genetic events, and discussions of the mechanisms and applications of estimated parameters will be emphasized. Lecture 2 hours, laboratory 3 hours per week. Prerequisite: BIOL 2533 and BIOL 3863.

BIOL4714V Honors Basic Immunology (Sp) A general overview of Immunology with emphasis on the underlying cellular, molecular, and genetic events, and discussions of more specialized issues in Immunology, such as tissue immunology, such as disease states involving the immune system, and other important problems in modern Immunology. Lecture 2 hours, laboratory 4 hours per week. Prerequisite: BIOL 2533 and BIOL 3863.

BIOL5713 Basic Immunology (Sp) A general overview of Immunology with emphasis on the underlying cellular, molecular, and genetic events, and discussions of more specialized issues in Immunology, such as tissue immunology, such as disease states involving the immune system, and other important problems in modern Immunology. Lecture 2 hours, laboratory 4 hours per week. Prerequisite: BIOL 2533 and BIOL 3863.

BIOL4742 Protistology (Odd years, Fa) The biology of eukaryotes other than animals, plants, and fungi with emphasis on morphology and modern approaches to phylogenetic systematics. Three hours lecture, four hours lab/week. Involves writing term papers. Corequisite: Lab compen. Prerequisite or Corequisite: BIOL 3023 or graduate standing. Prerequisite: BIOL 3023 and BIOL 2023 or graduate standing.

BIOL4743 Wildlife Management Techniques (Odd years, Sp) To familiarize students with techniques used in the management of wildlife populations. Students will be exposed to field methods and laboratory data analysis, a general overview of the design, and how to write a scientific paper. Management applications will be emphasized. Lecture 3 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisite: BIOL 3023.

BIOL4744 Fish Biology (Odd years, Sp) Morphology, classification, life history, population dynamics, and natural history of fishes and fish-like vertebrates. Lecture 3 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisite: BIOL 2533.

BIOL4753 General Virology (Sp) An introduction to viral life cycles, structure, and host cell interactions. Emphasis placed on molecular and biochemical aspects of virology. Two hour lecture and one hour discussion. Prerequisite: BIOL 2533 and BIOL 3323.

BIOL4763 Ornithology (Even years, Sp) Taxonomy, morphology, physiology, behavior, and ecology of birds. Lecture, laboratory, and field work. Corequisite: Lab component. Prerequisite: BIOL 3863.

BIOL4774 Biometry (Even years, Sp) Statistical methods and applications of biophysical concepts to biological data. Corequisite: Lab component. Prerequisite: BIOL 3863.

BIOL4774B Biometry (Even years, Sp) Students learn biophysical concepts and scientific writing by analyzing experiments and analyzing data, as well as through lecture, discussion, reading, writing, and problem solving. Lecture 3 hours, laboratory 3 hours each week. Corequisite: Lab component. Prerequisite: BIOL 3863.

BIOL4775V Biometry (Even years, Sp) Lectures and laboratory dealing with classification, morphology, distribution, ecology, behavior, and physiology of mammals. Two hours lecture and three hours laboratory by arrangement. Corequisite: Lab component. Prerequisite: 10 hours Biological Sciences.

BIOL4793 Introduction to Neurobiology (Sp) Exploration of the neurobiological underpinnings of perception, action, and experience including: how sense receptors convert information to the brain, how information flows through the nervous system, how the nervous system changes with experience, and how the system develops. Prerequisite: BIOL 2533.

BIOL480V Special Topics in Biological Sciences (Sp, Su) A course on the application of new areas of biological sciences not yet treated adequately in other courses. Prerequisite: 8 hours of biological sciences.

BIOL480VH Honors Special Topics in Biological Sciences (Sp, Su, Fa) Honors-oriented consideration of new areas of biological sciences not yet treated adequately in other courses. Prerequisite: 8 hours of biological sciences.

BIOL4814 Limnology (Odd years, Fa) Physical, chemical, and biological aspects of aquatic environments. Three hours lecture, laboratory by arrangement. Corequisite: Lab component. Prerequisite: CHEM 1123 and CHEM 1121L or BIOL 3863 or instructor's permission.

BIOL4833 Animal Behavior (Odd years, Fa) Organization, regulation, and phylogeny of animal behavior, emphasizing vertebrates. Lecture, laboratory, and field work. Corequisite: Lab component.

BIOL4844 Community and Ecosystem Ecology (Odd years, Fa) Survey of theoretical and applied aspects of community processes stressing structure, tropic dynamics, community interactions, and major community types. Corequisite: Lab component.

BIOL4857V Environmental Biology (Sp, Su) 1-3 In-depth molecular coverage of transcription, cell cycle, translation, and protein processing in eukaryotes and prokaryotes. Prerequisite: BIOL 2533 and BIOL 253L and CHEM 3063 and CHEM 3061L and CHEM 3613 or CHEM 3613L.

BIOL5334 Biochemical Genetics (Sp) Lectures and laboratories based on modern molecular genetic techniques for analyses of eukaryotes and manipulation of prokaryotes. A hands-on course in recombinant DNA techniques: laboratory practices in gene identification, cloning, and characterization. Lecture 3 hours, laboratory 4 hours per week. Corequisite: Lab component. Prerequisite: BIOL 3323 (or equivalent) and CHEM 3813 (or equivalent).

BIOL5343 Advanced Immunology (Sp) Aspects of innate, adaptive, and humoral immune systems and avian species. Molecular mechanisms underlying the function of the immune system are emphasized. A course in Basic Immunology prior to enrollment in Advanced Immunology is recommended but not required. Lecture 3 hours per week. (Same as POSC 5343)

BIOL5352L Immunology in the Laboratory (Sp) Laboratory course on immune-diagnostic laboratory techniques and uses for research and clinical diagnosis. Fundamental and characterization procedures, immunochromeny, flow cytometry, ELISA and cell culture assay systems. Laboratory 6 hours per week. Prerequisite: POSC 5343 or BIOL 5343.

BIOL5353C Ecological Genetics/genomics (Odd years, Fa) Analysis of the genetics of natural and laboratory populations with emphasis on the ecological bases of evolutionary change. Prerequisite: BIOL 2533 and BIOL 2531L, BIOL 3023 and MATH 2534 and STAT 2503 or equivalents.

BIOL5404 Comparative Botany (Odd years, Fa) A comparative approach to organizations classically considered to be plants with emphasis on morphology, life history, development, and reproduction. Three hours lecture and four hours per week. Corequisite: Lab component. Prerequisite: graduate standing.

BIOL5423 Human Evolutionary Anatomy (Irregular) Palaeobotanists reconstruct past lifeways and systematic relationships of our ancestors using the tricks pathogens use and the body's own defenses contribute to morphology and associated soft tissues. This course surveys methods and theories used to infer function and phylogeny, and details relevant aspects of the anatomy of living and fossil human ancestors. Prerequisite: ANTH 1013 and BIOL 1543. (Same as ANTH 5423)

BIOL5433 Principles of Evolution (Even years, Fa) An advanced survey of the mechanisms of evolutionary change with special emphasis on advances since the Modern Synthesis. Historical, theoretical, and population genetics approaches are discussed. Recommended: BIOL 3023 and BIOL 3321L and BIOL 3861L. Prerequisite: BIOL 3323 and BIOL 3863.

BIOL5511 Population Ecology (Odd years, Fa) An Interactions between environment, physiology, and properties of individuals and populations on both evolutionary and ecological scales. Prerequisite: BIOL 3863 and BIOL 4254.

BIOL5511L Population Ecology (Odd years, Fa) Demonstration of the models and concepts from BIOL 5513. Pre- or Corequisite: BIOL 5513.

BIOL5513 Population Ecology (Even years, Fa) Survey of concepts and applied aspects of population processes stressing models of growth, interspecific interactions, and adaptation to physical and biotic environments. Corequisite: BIOL 5511L. Prerequisite: BIOL 3324.

BIOL5517L Ecological Genes (Even years, Sp) To develop understanding of important ecological concepts through study of dynamics relationships among plants and their environment. To become familiar with the literature of plant ecology, and interpret and critique of ecological research. Prerequisite: BIOL 3864.

BIOL5524 Developmental Biology (Fa) An analysis of the concepts and mechanisms of development emphasizing the experimental approach. Corequisite: Lab component.

BIOL5526 Astrobiology (Irregular) Discusses the scientific basis for the possible existence of extraterrestrial life. Includes the origin and evolution of life on Earth, possibility of life elsewhere in the solar system (including Mars), and the possibility of life on planets around other stars. Prerequisite: Instructor consent. (Same as SPAC 5553)

BIOL5563 Cancer Biology (Fa) An introduction to the fundamental principles of cancer biology. Prerequisite: BIOL 2533 (Same as BIOL 4563) May be repeated for up to 6 hours of degree credit.

BIOL5643 Eukaryote Phylogeny (Odd years, Sp) Molecular analysis of the eukaryotic tree of life, phylogenetic tree reconstruction, and eukaryote diversity and evolutionary relationships.

BIOL5703 Mechanisms of Pathogenesis (Fa) A survey of events causing human disease at the molecular, cellular and genetic levels. Students learn biophysical concepts to biological data. Corequisite: Lab component. Prerequisite: BIOL 2533 and BIOL 3323.

Basic Immunology (Sp) A general overview of basic immunology, cell-mediated and humoral immunity, and molecular and genetic events controlling immune reactions. Reading of the primary literature on disease states involving the immune system.
Biological Sciences

BIOB3123 Introduction to Biological Engineering
An introductory course for undergraduate biomedical engineering students. It covers topics such as recombinant DNA technologies, cellular and tissue engineering, regenerative medicine, and biotechnology. Corequisite: Lab component. Prerequisite: CHEM 1123 and BIOL 2333.

BIOB3233 Advanced Biomaterials and Biofabricability
From Absorbable sutures to Zirconium alloy hip implants, biomaterials science influences nearly every aspect of medicine. This course focuses on the study of different classes of biomaterials and their interactions with human tissues. Topics include: biocompatibility; biofilm; hemocompatibility; wound healing response; foreign body response; design of orthopedic, dental and cardiovascular implants; orthopaedic and dental biomaterials; drug delivery systems; nanobiomaterials; smart biomaterials and the regulation of devices and materials by the FDA. Pre- or Corequisite: BIOM 2633. Prerequisite: CHEM 2123.

BIOB4413 Tissue Engineering (Fa)
This course introduces Tissue Engineering approaches at genetic and molecular, cellular, tissue, and organ levels. Topics include cell and tissue in vitro expansion, tissue organization, signaling molecules, stem cell and cell stem cell differentiation, organ regeneration, biomaterials and matrix for tissue engineering, bioreactor design for cell and tissue culture, dynamic and transportation in cell and tissue cultures, clinical implementation of tissue engineered organs and tissue-engineering devices. Corequisite: Lab component. Prerequisite: BIOL 2333 and BMG 3823.

BMEP450V Honors Thesis (Sp, Su) (1-4)
Provides Biomedical Engineering students an opportunity to explore a topic in depth through an independent research or design project. Prerequisite: Honors standing.

BMEP465V Individual Study (Sp, Su, Fa) (1-3)
Individual study and research of a topic mutually agreeable to the student and instructor.

BMEP4623 Biomedical Transport Phenomena (Fa)
An introduction to the modeling of complex biological systems using principles of transport phenomena and biochemical kinetics. This course will cover molecular transport due to velocity, concentration and thermal gradients. Topics include the conservation relations; rheology of Newtonian and non-Newtonian physiological fluids; regulation of blood flow; steady and unsteady solution in reacting and turbulent flows; transport processes in disease pathology. Prerequisite: MATH 2584 and CHEG 2113 or equivalent, CHEG 3523 or equivalent, and BIENG 3523.

BMEP470V Special Topics in Biomedical Engineering (Irregular) (1-4) Consideration of current biomedical engineering topics not covered in other courses. Prerequisite: Senior standing.

BMEP4703 Drug and Gene Delivery (Sp)
An advanced course covering important issues in drug and gene delivery in tumor and normal tissues. The course emphasizes quantitative analysis of molecule and nanoparticle transport through physiological barriers. In addition to modeling and design of medical devices, we will also discuss engineering-related topics on drug and gene delivery are discussed. These topics include physiologically-based pharmacokinetic analysis, transvascular transport, interstitial transport across cell membrane, drug and gene carriers, targeted delivery of drugs, oxygen transport, delivery of effector cells and genes

Pre- or Corequisite: BMG 4626.

BMEP4813 Biomedical Engineering Design I (Fa)
First semester of a two semester capstone biomedical engineering design class covered from the perspective of FDA design mandates. Students will design and prototype a medical device using Food and Drug Administration (FDA) requirements for Design Control. The course is designed as a partnership between end users (clinicians and patients) and student engineering teams. The users supply the ideas and clinical relevancy while the student teams develop requirements, build prototypes and conduct testing. The course is designed to mirror the FDA regulated product design approach that is taken by industry thereby exposing students to current best practices. All projects will be planned, managed and executed using FDA Design Control Requirements. To accomplish this, projects will utilize customer driven inputs to motivate the development of product specifications. Prototypes will be fabricated based on these product specifications. The prototypes will be tested and evaluated to ensure the specifications are met. All projects will be implemented using a planned, multidisciplinary, ethics-based team approach. Corequisite: Lab component. Pre- or Coreq: BMG 4827.

BMEP4873 Bionanotechnology (Sp)
This is an introductory course relevant to bionanotechnology. The topics covered in this course include nanobiomaterials, nanoparticles, nanowires, and superstructures.
ires, nanobiophics, nanobiosensors, and nanobiodevices. The applications of these nanomaterials and devices in clinical discovery and diagnostic technologies, point-of-care tests and point-of-care diagnostics, tele-medical care, controlled and targeted drug delivery, etc. will be particularly emphasized in the lecture. Prerequisite: BMGE 3823/BMGE 3811L, BMGE 2813, or CHEM 2813.

BMGE4923 Biomedical Engineering Design II (Fa) Continuation of BMGE 4813. Initial designs will be prototyped before going through a design review. Design verification issues and improvements will then be solved in a redesign phase following a design process based on Food and Drug Administration Quality System Regulation (FDA-QSR). Projects will be team oriented and lead to increased project management skills. In addition, a revised design process consideration will continue. A final written design document and an oral presentation of the working prototype will culminate the class. Prerequisite: BMGE 4813.

BMGE4971 Advanced Tissue Engineering and Regenerative Medicine (Fa) This is an advanced course focusing on tissue engineering and regenerative medicine. Topics include stem cell tissue engineering, cell signaling, transport and kinetic, biomaterials and scaffolds, surface interactions, viral and nonviral-based gene delivery, tissue engineered organs, organ transplantation, nanomedicine, cell replacement therapy, and organ regenerative therapy. Technologies used to grow clinical relevant tissues and cells will be discussed with an emphasis on current research. Prerequisite: Graduate standing.

BMEG5203 Mathematical Modeling of Physiological Systems (Sp) Application of mathematical techniques to the study of physiological systems. The emphasis will be on cellular physiology and cardiovascular system. Cellular physiology topics include models of cellular metabolism, membrane dynamics, membrane potential, excitability, wave propagation and cellular function regulation. Cardiovascular system topics include models of blood cells, oxygen transport, cardiac output, cardiac regulation, and circulation. Prerequisite: MATH 2584. (Same as ME 5203)

BMEG560V Advanced Individual Study (Irregular) (1-6) Individual study and research of a topic mutually agreeable to the student and faculty member. Prerequisite: Graduate standing.

BMEG570V Advanced Special Topics (Irregular) (1-6) Consideration of current biomedical engineering topics not covered in other courses. Prerequisite: Graduate standing.

BMGE6801 Graduate Seminar (Sp, Fa) A weekly seminar series comprises of presentations by invited speakers and graduate students as well as didactic instruction in relevant topics including professional development, research ethics, authorship, technology transfer, intellectual property, biosafety, and the role of animals in biomedical research. Prerequisite: Graduate standing.

BMGE600V Master's Thesis (Irregular) (1-6) A Master’s Thesis will be designed with a focus on original research or investigation. Prerequisite: Graduate standing.

BMGE601X Doctoral Dissertation (Irregular) (1-6) Doctoral Dissertation. Prerequisite: Graduate standing.

CATE1001 Practicum in Career & Technical Education (Sp, Fa) This practicum is a requirement for entry into the Career & Technical teacher preparation program. Students will be involved in documented experiences with children for a minimum of 60 hours with at least 20 of them being in career & technical education classrooms at three schools with diverse populations. (Same as CIED 1011, PHED 1003)

CATE380V Supervised Work Experience (Sp, Su, Fa) (1-9) Supervision in business and industry under guidance. Design for students who desire or need directed occupational experience. May be repeated for up to 6 hours of degree credit.

CATE390V Competency Based Teacher Development: Program Organization (Sp, Su, Fa) (3-12) Development of competencies related to the methodology of instructional planning, execution, and evaluation. Provided by PBTE modules and University resource person. Enrollment before CATE 391V and 392V. Prerequisite: Employed in service vocational-technical education field based instructor. May be repeated for up to 12 hours of degree credit.

CATE391V Competency Based Teacher Development - Teaching Adults (Sp, Su, Fa) (3-12) Development of competencies related to vocational guidance, contemporary instructional techniques, student-vocational organizations. Provided by PBTE modules and University resource person. Prerequisite: Completion of 12 credit hours of CATE 390V and employee in-service-vocational-technical education field based instructor. May be repeated for up to 24 hours of degree credit.

CATE392V Competency Based Teacher Development: Teaching & Learning (Sp, Su, Fa) (3-12) Development of competencies related to program planning, development, evaluation; school community relations; and professional development. Provided by PBTE modules and University resource person. Prerequisite: Completion of 12 credit hours of CATE 391V and employee in-service-vocational-technical education field based instructor. May be repeated for up to 12 hours of degree credit.

CATE393V Competency Based Internship: Educational Legal Issues (Sp, Su, Fa) (3-6) In an actual school setting the student will satisfactorily demonstrate the competencies required in the various operating components of the school program. Instruction and follow-up will be provided by a University resource person. Prerequisite: Completion of 12 credit hours of CATE 392V and employee in-service-vocational-technical education field based instructor. May be repeated for up to 24 hours of degree credit.

CATE4003 Introduction to Professionalism (Fa) Studying and developing educational concepts in career and technical education with accepted principles of professionalism in secondary education settings.

CATE4003H Honors Introduction to Professionalism (Fa) Studying and developing professional concepts in vocational education with accepted principles of professionalism applied to career and technical education settings.

CATE4013 Teaching Strategies (Fa) Methods and techniques in the preparation and delivery of teaching. CATE4023 Classroom Communication and Social Skills (Sp) and techniques in classroom management, including professional ethics and school policies related to students, faculty and programs.

CATE4033 Assessment / Program Evaluation (Fa) An introduction to constructing, evaluating and interpreting tests; descriptive and inferential statistics; state competency testing; and guidelines for state program evaluations.

CATE4041 Lab Management in Career & Technical Education (Sp) Selection, design and evaluation of laboratory experiences in business education, family and consumer sciences and technology education. Corequisite: CATE 406V.

CATE4051 Seminar Teaching Internship (Sp) Site-based field experiences are integrated with the course content to provide continuity between theory and practice. Classroom management, ethics and diversity are emphasized. Corequisite: VOED 406V.

CATE406X Teaching Internship (Sp) A minimum of 15 weeks will be spent in an off-campus school, at which time the student will have an opportunity under supervision to observe, to teach, and to participate in other activities involving the student and the community. Prerequisite: Senior status, CATE 4003, CATE 4013, CATE 4023, CATE 4033, CIED 3023 and CIED 3033.

CATE4803 Problems in Career & Technical Education (Sp, Su, Fa) Problems, analysis, planning and instruction in career and technical education. You must have approval by the instructor of this course to enroll. Business education majors only.

CATE5013 Teaching Strategies (Fa) This course is designed to offer a variety of ideas and experiences concerning methods of teaching, planning and presenting instruction.

CATE5016 Cohort Teaching Internship (Sp) A minimum of 12 weeks will be spent in an off-campus school, at which time the intern will have an opportunity under supervision to observe, to teach, and to participate in other activities involving the school and the community. Prerequisite: Cohort year status.

CATE5033 Assessment/Program Evaluation (Fa) An introduction to constructing, evaluating, and interpreting tests; descriptive and inferential statistics; state competency testing; and guidelines for state program evaluations. Prerequisite: Graduate Status.

CATE5453 Career Orientation Programs (Su) Provides a survey of types and sources of occupational information and methods of providing occupational information. The course introduces students to career and technical education. Prerequisite: Teacher's involvement in career and technical education settings. A minimum of 15 weeks.

CATE5503 Assessment/Program Evaluation (Fa) An introduction to constructing, evaluating, and interpreting tests; descriptive and inferential statistics; state competency testing; and guidelines for state program evaluations. Prerequisite: Graduate Status.

CATE5573 Instructional Materials (Sp, Su) A comprehensive course designed to give the student the opportunity to understand, prepare, and test materials leading toward excellence in instruction.

CDIS2523 Introduction to Communicative Disorders (Sp, Fa) An introductory course which surveys the interests of language pathologists and audiologists with specific attention to the general classification and recognition of disorders of speech, language, hearing, and general trends in rehabilitation. Consideration given to the classroom teacher's involvement in communication disorders.

CDIS3109 Introduction to Audiology (Fa) Introduction to the basic concepts for administering and interpreting hearing tests, including the anatomy and physiology of the auditory system, disorders of the ear, and techniques for administering basic pure tone threshold tests. Prerequisite: CDIS 3124 and CDIS 3213.

CDIS3213 Anatomy of Physiology of the Speech and Hear- ing Mechanisms (Fa) Structure and the organic mechanisms responsible for speech, hearing, and audition. Pre or Co-requisite: BIOL 1543/1541L or higher.

CDIS3224 Language Development in Children (Fa) Study of the nature of language behavior and of the typical developmental course of speech and language. Emphasis on the functional and communicative purposes, with primary emphasis on the preschool and early school-age child. Corequisite: Lab component. Pre or Co-requisite: PSYC 2003.

CDIS3224H Honors Language Development in Children (Fa) Study of the nature of language behavior and of the typical developmental course of speech and language functions for communicative purposes, with primary emphasis on the preschool and early school-age child. Corequisite: Lab component. Pre or Co-requisite: PSYC 2003.

CDIS3233 Introduction to Clinical Practice (Sp) An introduction to the various aspects of clinical operations including the technical and interpersonal relationship skills necessary for case management and a survey of professional standards. Pre or Corequisite: COMM 1313.

CDIS3923H Honors Colloquium (Irregular) Treats a special issue, offered as part of the Honors Program. Prerequisite: Honors candidacy (not restricted to candidacy in speech or dramatic art). May be repeated for credit.

CDIS399VH Honors Course (Irregular) (1-4) Prerequisite: Junior standing. May be repeated for up to 12 hours of degree credit.

CDIS4001 Clinical Practicum Undergrad (Sp, Fa) Entry-level training in speech-language clinical practicum activities. This course is taken for satisfactory or unsatisfactory credit. Prerequisite: CDIS 2224 and CDIS 3003 and CDIS 3223 and CDIS 3234 plus satisfactory completion of specific program requirements for admission to clinical practice.

CDIS4141 Advanced Introduction to Aural Rehabilitation (Sp) Study of the technique used in the rehabilitation of speech and language problems of the hearing impaired including the role of amplification, auditory training, and speech reading in rehabilitation experience.

CDIS4183 Clinical Assessment of Speech and Language Disorders (Sp) Study of the basic diagnostic procedures used in speech-language pathology. Emphasis is placed on the clinical processes of assessment, including criteria for test selection, techniques in test administration, and interpretation of test. Pre or Corequisite: Prior coursework in CDIS and ANTH 1023.

CDIS4213 Introduction to Speech and Hearing Science (Sp) Study of the acoustic structure of oral speech and the auditory skills underlying speech perception. Pre or Corequisite: MATH 1203 or higher. Prerequisite: CDIS 3203, CDIS 3213, CDIS 3223.
CDIS 5123 TBI and Right-Hemisphere Disorders (Irregular) Study of disorders of language acquisition and usage in children and adolescents, with emphasis upon the nature, assessment, and treatment of such disorders. Prerequisite: CDIS 3223.

CDIS 5253 Motor Speech Disorders (Sp) Study of motor speech production disorders related to damage to central nervous systems, peripheral nervous systems, and cranial nerve roots. Cerebral palsy, adult dysthria, apraxia, and dysphagia are emphasized. Both theoretical and treatment considerations are addressed. Prerequisite: CDIS 4253 or equivalent, and graduate standing.

CDIS 5273 Language, Learning and Literacy (Su) An examination of language-based literacy skills, including consideration of development, disorders, assessment and intervention. Prerequisite: CDIS 4223, or CDIS 5253 (1-4).

CDIS 5293 Augmentative and Alternative Communication (FA) Approaches to communication management with the severely and profoundly handicapped child or adult, with primary emphasis on augmentative and alternative communication assessment and intervention. Prerequisite: Graduate standing.

CDIS 381 Diagnostic Practicum (Sp, Su, Fa) Practicum activities in speech-language assessment. Prerequisite: Graduate standing.

CDIS 391 Clinical Practicum: Hearing Disorders (Sp, Su, Fa) Practicum in audiology.

CDIS 484V Off-Campus Practicum: School Site (Sp, Fa) (1-6) Practicum activities in speech-language disorders in a public school setting. Prerequisite: Graduate standing.

CDIS 558V Internship: Clinical Site (Sp, Su, Fa) (3-6) Field placement in approved clinical setting for clock hours in speech-language pathology and treatment. Students in the master's program must enroll in a minimum of 3 credit hours of CDIS 558V or CDIS 578V during their last semester of graduate studies. Prerequisite: Graduate standing; completion of other required practicum courses. May be repeated for up to 6 hours of degree credit.

CDIS 568V Off-Campus Practicum: Clinical Site (Sp, Su, Fa) (1-6) Practicum activities in speech-language disorders in an off-campus clinical site. Prerequisite: Graduate standing; completion of at least 2 semesters of CDIS 528V.

CDIS 575V Internship: Public School Site (Sp, Su, Fa) (3-6) Field placement in approved public school setting for clock hours in speech-language pathology assessment and treatment. Students in the Master's program must enroll in a minimum of 3 credit hours of CDIS 578V or CDIS 558V during their last semester of graduate studies. Prerequisite: Graduate standing; completion of other required practicum courses. Prerequisite: May be repeated for up to 6 hours of degree credit.

CDIS 550V Special Problems (Sp, Su, Fa) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

CDIS 538V Seminar in Professional Issues, Special Topics (Sp, Fa) (1-3) Selected topics in professional issues in speech-language pathology and audiology.

CDIS 500V Master's Thesis (Sp, Su, Fa) (1-4) Prerequisite: Graduate standing.

CDIS 599V Seminar in Communication Sciences and Disorders (Irregular) (1-4) Discussion of pertinent topics and issues in the discipline of communication sciences and disorders. Prerequisite: Graduate standing. May be repeated for up to 18 hours of degree credit.

CHEG 1112H Honors Introduction to Chemical Engineering (Sp) Multiple-reaction, multi-unit mass balances; vapor-liquid equilibrium; enthapy balances; rate concepts; thermodynamics and equilibrium stage concepts; engineering economics; professionalism; ethics; computer applications; and introduction to process simulation. Prerequisite: CHEG 2131 or MATH 1523.

CHEG 1212L Chemical Engineering Laboratory I (Sp, Fa) Experimental measurements of various physical properties and comparison with published values and theoretical predictions. Interpretation of results using graphical, numerical, and statistical tools, and presentation of results in written technical reports and oral briefings. Corequisite: CHEM 1103 or CHEM 1113 or CHEM 1213.

CHEG 1213 Introduction to Chemical Engineering II (Sp) Multiple-reaction, multi-unit mass balances; vapor-liquid equilibrium; enthapy balances; rate concepts; thermodynamics and equilibrium stage concepts; engineering economics; professionalism; ethics; computer applications; and introduction to process simulation. Corequisite: CHEM 1103 or CHEM 1113 or CHEM 1213.

CHEG 2131 Fluid Mechanics (Sp, Su, Fa) Analysis and design of fluids handling equipment and systems. Application of the principles of fluid statics, fluid dynamics, compressible flow, etc. Pre- or Corequisite: MATH 2574.

CHEG 2132 Honors Fluid Mechanics (Sp, Su, Fa) Analysis and design of fluids handling equipment and systems. Application of the principles of fluid statics, fluid dynamics, compressible flow, etc. Pre- or Corequisite: MATH 2574.


CHEG 2313 Heat Transport (Sp, Fa) Application of the principles of conduction, convection and radiation to the analysis and design of chemical processing heat transfer equipment and systems such as double-pipe and shell-and-tube heat exchangers, multiple-effect evaporators, condensers, and boilers. Prerequisite: CHEG 2133 and CHEG 2131.

CHEG 3143H Honors Heat Transport (Sp, Fa) Application of the principles of conduction, convection and radiation to the analysis and design of chemical processing heat transfer equipment and systems such as double-pipe and shell-and-tube heat exchangers, multiple-effect evaporators, condensers, and boilers. Prerequisite: CHEG 2133 and CHEG 2131.

CHEG 3153 Non-Equilibrium Mass Transfer (Sp) Fundamentals of chemical diffusion processes. Applications in chemical engineering design of stagewise and continuous separations. Prerequisite: CHEG 2133 and CHEG 2131.

CHEG 3153H Non-Equilibrium Mass Transfer (Sp) Fundamentals of chemical diffusion processes. Applications in chemical engineering design of stagewise and continuous separations. Prerequisite: CHEG 2133 and CHEG 2131.

CHEG 3223 Chemical Engineering Laboratory II (Sp, Fa) Experimental investigations of fluid flow, heat transfer, and thermodynamics. Complete written reports are required. Pre- or Corequisite: CHEG 2143. Corequisite: Drill component. Prerequisite: CHEG 1212L.

CHEG 3232 Chemical Engineering Computer Methods (Sp) Application of computer methods to chemical engineering problems including a review of structured programming principles. Corequisite: CHEG 3143 and drill component. Prerequisite: MATH 2584.

CHEG 3323 Thermodynamics of Multi-Component Systems (Sp, Fa) The use of the state principle and energy and entropy balance developed in CHEG 2313 is extended to low processes. Physical and chemical equilibrium processes are considered in detail. Prerequisite: CHEG 2133 and MATH 2574.

CHEG 3323H Honors Thermodynamics of Multi-Component Systems (Sp, Fa) The use of the state principle and energy and entropy balance developed in CHEG 2313 is extended to low processes. Physical and chemical equilibrium processes are considered in detail. Prerequisite: CHEG 2133 and MATH 2574.

CHEG 3333 Chemical Engineering Reactor Design (Sp, Su)
Course Descriptions

University of Arkansas, Fayetteville

Section 1: Introduction to Chemistry (Su, Fa) Prerequisite: CHEM 3703 and CHEM 3702L.

Section 2: Introduction to Biochemistry (Su, Fa) Prerequisite: CHEM 3703 and CHEM 3702L.

Section 3: Introduction to Biochemistry (Su, Fa) Prerequisite: CHEM 3703 and CHEM 3702L.

Section 4: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 5: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 6: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 7: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 8: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 9: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 10: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 11: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 12: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 13: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 14: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 15: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 16: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 17: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 18: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 19: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 20: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 21: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 22: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 23: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 24: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 25: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 26: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 27: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 28: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 29: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 30: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 31: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 32: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 33: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 34: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 35: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 36: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 37: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 38: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 39: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 40: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 41: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 42: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 43: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 44: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.

Section 45: Research Seminar in Chemistry (Su, Fa) Prerequisite: CHEM 3704 and CHEM 3702L.
CHEM5223 Chemical Instrumentation (Odd years, Sp) Use and application of operational amplifiers to chemical instru-
ments; current electronic and microprocessor interfaces; soft-
ware development and real-time data acquisition. Prerequisite: 
CHEM 4213 and PHYS 2074.

CHEM5233 Chemical Separations (Even years, Fa) Modern separation techniques; liquid chromatography (seco-
nomic, liquid-liquid partition, ion exchange, exclusion) and 
gas chromatography. Theory and instrumentation is discussed with 
emphasis on practical aspects of separation science. Prereq-
usite: CHEM 3213.

CHEM5243 Electrochemical Methods of Analysis (Even years, Sp) Topics will include: diffusion, electron transfer ki-
etics, and reversible and irreversible electrode processes; 
followed by a discussion of conductivity, polarography, chronoca-
nometry, polarometry, voltammetry and chronoamperometry. 
Prerequisite: CHEM 4213 and MATH 2574.

CHEM5253 Spectroscopic Methods of Analysis (Odd years, Fa) Principles and methods of modern spectroscopic 
analysis. Optics and instrumentation necessary for spectros-
copy is also discussed. Topics include atomic and molecular 
absorption and emission techniques in the ultraviolet, visible, 
and infrared spectral regions. Prerequisite: CHEM 4213.

CHEM5263 Nuclear Chemistry (Odd years, Fa) Nuclear structure and properties, natural and artificial radioactivity, 
radioactive decay processes, nuclear reaction and interactions 
of radiation with matter. Prerequisite: CHEM 3514.

CHEM5273 Cosmochemistry (Odd years, Sp) Laws of distri-
bution of the chemical elements in nature, cosmic and terres-
trial abundance of elements; origin and age of the earth, solar 
system and the universe. Prerequisite: CHEM 5814.

CHEM5473 Chemical Kinetics (Sp) Theory and applications 
of the principles of kinetics to reactions between substances, 
both in the gaseous state and in solution. Prerequisite: CHEM 
3514.

CHEM5513 Biochemical Evolution (Even years, Sp) Abiotic 
synthesis of biomolecules on Earth, the origin of cells, genetic 
information, origin of life on Earth and elsewhere, evolution 
and diversity, ecological niches, bacteria, archaea, eukary-
oites, novel metabolic reshaping of the environment, life being 
reshaped by the environment, molecular data and evolution. 
Prerequisite: CHEM 5813.

CHEM5523 Physical Organic Chemistry (Fa) Introduction to 
the theoretical interpretation of reaction, reaction mecha-
nisms, and molecular structure of organic compounds. 
Application of theories of electronic structure; emphasis on recent 
developments. Prerequisite: (CHEM 3514 and CHEM 3713 and 
CHEM 3712L).

CHEM5563 Organic Reactions (Fa) The more important 
types of organic reactions and their applications to various 
classes of compounds. Prerequisite: CHEM 3514 and CHEM 
3713 and CHEM 3712L.

CHEM5573 Methods of Organic Analysis (Fa) Interpretation of 
physical measurements of organic compounds in terms of 
molecules; application of known techniques on spectroscopic 
methods (infrared, ultraviolet, magnetic resonance, and mass 
spectra). Prerequisite: (CHEM 3712L and CHEM 3713 and 
CHEM 3514).

CHEM5813 Biochemistry I (Fa) The first of a two-course 
series for students planning graduate studies in biochemistry, 
biology, agriculture, and chemistry. Topics covered include protein 
structure and function, enzyme kinetics, enzyme mechanisms, 
and carbohydrate metabolism. Prerequisite: CHEM 3712L and 
CHEM 3713 (or CHEM 3811L and CHEM 3811L) and CHEM 
3514 or CHEM 3453 and CHEM 3514.

CHEM5843 Biochemistry II (Sp) A continuation of CHEM 
3813 covering topics including biological membranes and 
biological energetics, photochemistry, synthesis, lipids and lipid 
metabolism, nucleic acid structure, structure and synthesis, and 
molecular biology. Prerequisite: CHEM 5813.

CHEM600V Master's Thesis (Sp, Su, Fa) (1-6) Prerequisite: 
Graduate standing. May be repeated for up to 12 hours of degree 
credit.

CHEM6011 Chemistry Seminar (Sp, Fa) Members of the fac-
ulty, graduate and advanced students meet weekly for discus-
sion of current chemical research. Weekly seminar sections 
are offered for the Departmental seminar and for divisional 
seminars in biochemistry and in analytical, inorganic, nuclear, 
organic, and physical chemistry. Chemistry graduate stu-
dents register for the Departmental seminar section and one 
of the 3 seminar sections each semester they are in residence. 
Seminar credit does not count toward the minimum 
hourly requirements for any chemistry graduate degree. 
Prerequisite: (CHEM 3514 and CHEM 3713 and CHEM 3712L) 
and seminar seminar standing. May be repeated for up to 1 hours of degree credit.

CHEM619V Special Topics in Inorganic Chemistry (Irregu-
lar) (1-3) Topics which have been covered in the past include: 
technique and theory of x-ray diffraction, electronic structure 
of transition metal complexes, inorganic reaction mechanisms, 
and physical methods in inorganic chemistry. May be repeated 
for credit.

CHEM6283 Mass Spectrometry (Odd years, Sp) This course 
devoted to the fundamental principles and applica-
tions of mass spectrometry. May be offered in sub-
ject not specifically covered by courses otherwise listed. May 
be repeated for up to 6 hours of degree credit.

CHIN4313 Business Culture & Society in China (Fa) Intro-
duction of key principles, customs, and behaviors in Chinese 
society to help students understand the Chinese business con-
text. Discusses the implications for economic development, 
intercultural management and international business conduct 
through case studies. This course is taught in English. Prereq-
usite: Chinese proficiency or instructor permission.

CHIN4333 Business Chinese Language in Speaking and 
Writing (Sp) Introduction of Chinese vocabulary, formats, 
and expressions in business environments, such as company 
structures, management, banking and accounting, as well as 
how to read and write contracts, letters, and other business 
documents. Prerequisite: CHIN 3003 or equivalent Chinese 
proficiency.

CHLP1103 Personal Health and Safety (Sp, Fa) Health 
and safety problems with emphasis on the promotion of individual 
health and safety.

CHLP1203 Prevention of Drug Abuse (Fa) Provides an over-
view of drugs and abuse in society. Also assists the student in 
evaluating drug abuse prevention approaches for social, 
private, or community settings.

CHLP3103 Introduction to Human Sexuality (Sp) An exami-
nation of human sexuality with a critical analysis of male and 
female attitudes and values affecting self-understanding and 
personal identity.

CHLP2101 Special Topics (Sp, Fa) Examination and ap-
plication of health promotion concepts based on individual-
ized health hazard appraisal. (Not to replace content courses 
leading to teacher certification in health education). May be 
repeated for up to 5 hours of degree credit.

CHLP2613 Foundations of Community Health (Sp) History 
and philosophy of health education discipline; organization 
and administration of health education programs; curriculum 
design and evaluation; professional and student roles; 
and student observation in school and non-school settings.

CHLP2662 Terminology for the Health Professions (Sp, Fa) 
Emphasis is on word roots and combined forms of words 
describing various facets of health and clinical practice. Descriptive 
definitions with application of practical significance included for 
the health professional.

CHLP310V Seminar (Irregular) (1-3) Synthesis and critical 
analysis of current literature in the area of community health 
promotion. May be repeated for up to 12 hours of degree 
credit.

CHLP3633 First Responder-First Aid (Sp, Su, Fa) Pre-
parares persons to administer cardiopulmonary resuscitation 
and emergency aid to victims of serious bleeding, poisoning, 
shock, fracture, and other forms of injury until emergency med-
cal services personnel arrive at the scene.

CHLP3643 Community Health Planning and Promotion 
(Even years, Fa) Emphasis on community analysis; defining 
and verifying community health problems; establishing pro-
gram goals; defining and assessing health behaviors; formu-
lation of educational goals, objectives, methods, and activities; 
planning programs; and designing program evaluation.

CHLP3663 Principles and Practice of Mental Health Pro-
motion (Irregular) Understanding and practicing the princi-
ple of mental health promotion with special emphasis on the 
level wellness. This course encourages students' exploration 
of the mental dimensions of holistic health and presents strate-
gies to achieve a more healthful balance in life.

CHLP3673 Health Care Consumerism (Irregular) Study of 
products and services provided by the health care delivery 
system; an analysis of those components lacking scientific 
credibility, yet promoted for the maintenance or restoration of 
health and safety.

CHLP3683H Honors Health Care Consumerism (Even 
years, Sp) Study of products and services provided by the 
health care delivery system; an analysis of those components

University of Arkansas, Fayetteville

330
CHLP443 Internship in Community Health (Sp, Su, Fa)
Designed to provide the student with an extended work experience in a selected community health program. The student works under college supervision with a professional in the health field, and the faculty advisor is a member of the HCOR, CHLP, or HLC. May be repeated for up to 6 hours of degree credit.

CHLP410V Global Health: Issues, Concepts and Perspectives (Su) (3-4) Emphasis placed on needs assessment, development, implementation, evaluation, and sustainability of public health initiatives designed to improve the health and well-being of community members at all levels of the health continuum. The course will explore the cultural, behavioral, and environmental health practice, and major environmental health legislation and policy. Format for course will include lecture web based seminars, and small group seminars.

CHLP605V Independent Study (Sp, Su, Fa) (1-6) Project. Prerequisite: M.S. degree in Community Health Promotion and HHP 3533 and ESRM 5393.

CIED3073 Early Adolescent Literature (Sp) A study of rationales and strategies for incorporating early adolescent literature across the middle level curriculum. Includes an examination of selected texts from each. Corequisite: CIED 3063.

CIED3073H Honors Early Adolescent Literature (Sp) A study of rationales and strategies for incorporating early adolescent literature across the middle level curriculum. Includes an examination of genres and selected texts from each. Corequisite: CIED 3063. Prerequisite: CIED 3043 and honors candidacy.

CIED3093 Essentials of Literacy (Sp, Fa) An undergraduate foundational course focusing on literacy development and processes of children from the emergent to developmental stages, materials and effective research-based teaching strategies for classroom practice. Not for credit in Childhood Education (CHED) degree program.

CIED3103 Children's Literature (Fa) A survey of children's literary works, authors, and illustrators with emphasis on the assessment and integration of literature into the classroom. Prerequisite: CIED 1011 or CIED 2003, ENGL 1013, ENGL 1023, and CIED 3263.

CIED6033 Classroom Learning Theory (Sp, Su, Fa) A survey of the major theories of learning with special emphasis on human learning and implications for education. Prerequisite: CIED 1002 and CIED 1011; or MUED 2012; or PHED 1003; or CATE 1001; or AGED 1123 and 1031, and HESC 1501 or PSYC 2003.

CIED6034 Literacy Strategies for Middle Level Learners (Sp) This course is designed to examine theories and practice regarding literacy development and assessment grounded in the knowledge of the characteristics of the middle level learner. A ten-hour field experience is required. Corequisite: CIED 3073. Prerequisite: CIED 3043.

CIED6035H Honors Literacy Strategies for Middle Level Learners (Sp) This course is designed to examine theories and practice regarding literacy development and assessment grounded in the knowledge of the characteristics of the middle level learner. A ten-hour field experience is required. Corequisite: CIED 3073 and honors candidacy. Prerequisite: CIED 3043 and honors candidacy.

CIED6036H Honors Middle Level Strategies (Sp) A study of rationales and strategies for incorporating early adolescent literature across the middle level curriculum. Includes an examination of selected texts from each. Corequisite: CIED 3063. Prerequisite: CIED 3043.

CIED6037 Early Adolescent Literature (Sp) A study of rationales and strategies for incorporating early adolescent literature across the middle level curriculum. Includes an examination of genres and selected texts from each. Corequisite: CIED 3063. Prerequisite: CIED 3043.

CIED6037H Honors Early Adolescent Literature (Sp) A study of rationales and strategies for incorporating early adolescent literature across the middle level curriculum. Includes an examination of genres and selected texts from each. Corequisite: CIED 3063. Prerequisite: CIED 3043.
Course Descriptions

literacy and on the continuing development of literacy abilities in pre-kindergarten and early elementary years. Prerequisite: PSYC 1013, 1016, 1018, or CIED 3203.

CIED5123 Methods Mathematics (Sp, Su) An examination of the content of elementary mathematics courses. Special emphasis is placed upon methods of teaching content necessary to develop instructional skills, understanding and knowledge. Prerequisite: MATH 1203, MATH 2213 and MATH 2223.

CIED5133 Integrated Social Studies (Sp) Focuses on the methodology of facilitating pre-kindergarten and elementary children’s de-velopment of language arts and social studies. Integrates the curriculum and teaching strategies in language arts and social studies. Prerequisite: PLC 3003 and (HIST 2003 or HIST 2013) or (HIST 2003 or HIST 2013) and GEOG 1123 or higher.

CIED5163 Internship in the Elementary Classroom (Sp, Fa) Study of the methods and materials in teaching science. Classroom applications of teaching strategies with analysis of teacher effectiveness in seminar settings are emphasized.

CIED5203 Language Development for the Educator (Sp, Fa) Nature of speech-language development in preschool and school-aged children, including cognitive prerequisites, speech contexts, and relationships between language acquisition and literacy. Language differences (dialectal, bilingual) and speech-language disorders are explored. The role of the educator in facilitating language acquisition is emphasized.

CIED5403 Elementary Seminar (Sp) This course is designed to synthesize the content presented in the Bachelor of Science in Education, Elementary Education program. It focuses on refinement of generalized knowledge to accommodate specialized content relevant to young children.

CIED5413 Seminar for Foreign Language License (Sp) This course is designed to identify and provide evidence of content language specific proficiencies in the four skills of reading, writing, listening, and speaking a foreign language.

CIED5402 Teaching in Inclusive Settings (Su) This course is designed to prepare pre-service teachers to teach in inclusive classroom settings at the secondary level. Course content focuses on the ways in which exceptionally, specifically focused on high-incidence disabilities and culture, specifically focused on English language learners mediate the learning experiences of secondary level students.

CIED5413H Honors Integrated Communication Skills (Su) Focuses on the methodology of facilitating pre-kindergarten, kindergarten, and early elementary children’s literacy development. Emphasis is placed on the integration of the communication skills of reading, writing, speaking, and listening across the curriculum. Prerequisite: CIED 3103 and CIED 3113.

CIED5412 Literacy Assessment (Sp, Fa) An undergraduate course examining assessment and intervention for prospective classroom teachers. Participants become familiar with assessment procedures and instruments for identifying student strengths and weaknesses in literacy, determining effective instructional strategies for literacy improvement, and principles of reporting assessment and intervention outcomes. Prerequisite: CIED 3093.

CIED5413 Practicum in Secondary Education (Sp, Su, Fa) This practicum is a requirement for entry into the Secondary Master of Arts (M.A.T.) in teaching program. Students will be involved in documented experiences with children for a minimum of 60 hours with at least 20 of them being in schools with children in grades 7 through 12.

CIED5413 Measurement, Research, and Readings (Su) This course is designed to provide an introduction to educational assessment, research methods, and what research has to say about teaching and learning in elementary education.

CIED5413 Curriculum Design (Sp) A course in the design and adaptation of curriculum for students in regular, elemen-tary classrooms. Theoretical bases and curriculum models will be reviewed. Prerequisite: CIED 3093.

CIED5415 Classroom Management (Fa) This course focuses on a number of different management techniques for Pre-K through upper elementary grades that can be used in general education classrooms.

CIED5416 Senior Project (Sp) This course is designed to pro-vide students with the research skills necessary to complete their senior project.

CIED5417 Student Teaching (Sp, Fa) This course is a field-based practicum experience in which the student teaches in the schools for the first time and gains hands-on experience under the direct supervision of the University of Arkansas, Fayetteville.
CIED5173 Literacy Assessment and Intervention (Su, Fa)
Focuses on assessment of young children’s literacy skills. Techniques include error analysis, informal observations, modeling, analysis, and portfolio assessment. Prerequisite: Admission to graduate school.

CIED5183 Readings in Early Childhood Education (Fa)
Will continue to explore historical development of early childhood education. Emphasis on the development of classic strategies and will involve the impact these have had on the most recent issues in early childhood education. Prerequisite: Admission to the CIED M.A.T.

CIED5193 Methods of Instruction for Middle School II (Fa)
Second special methods course for teaching at the middle level. Emphasizes further refinement of teaching skills and methods; the integration of the sciences, mathematics, and technology; mental, social, and emotional development, and the integration of social studies and English language arts. Prerequisite: CIED 5092 and admission to the M.A.T. program.

CIED5203 Problem-Based Mathematics (Irregular)
This graduate level course focuses on learning and evaluating mathematics, teaching strategies to support the meaningful integration of science, technology, and engineering (STEM) with the emphasis on mathematics in the K-4 classroom. A strong foundation for integrating the STEM disciplines through a problem-based approach within the elementary curriculum will be developed by providing students with theoretical frameworks, research, resources, and methods related to appropriate and effective classroom practice. Prerequisite: CIED 3123 (Mathematical Methods).

CIED5213 Teaching Problem-Based Science in the Elementary Grades (Sp)
This graduate level course focuses on teaching strategies, the use of teaching strategies to support the meaningful integration of science, technology, engineering and mathematics ( STEM) with the emphasis on science in the K-4 classroom. A strong foundation for integrating the STEM disciplines through a problem-based approach within the elementary curriculum will be developed by providing students with theoretical frameworks, research, resources, and methods related to appropriate and effective classroom practice. Prerequisite: Successful completion of CIED 3143 (Teaching Science) and admission to the M.A.T. program or enrollment in the M. Ed. program.

CIED5223 Issues and Principles of Secondary Education (Su)
This course provides an introduction to the principles of the secondary education M.A.T. program. It provides the student with information about foundation issues in education, including history and philosophy of American Education, current trends and issues in educational and a social theories of education, characteristics of learners, and learning processes. Prerequisite: Admission to M.A.T. degree program.

CIED5232 Interdisciplinary Studies (Sp, Su, Fa)
Introductions to graduate-level study; current content, course planning topics and themes, instructional strategies, and evaluation and assessment. Prerequisite: Admission to the M.A.T. program.

CIED5263 Methods of Instruction I (Su) Study of the methods and materials in the special content areas. In includes philosophical, cognitive, and psychological dimensions of teaching the content area. The planning of instruction, misconceptions, development of instructional strategies, and alternative content are included. Prerequisite: Admission to the M.A.T. program.

CIED5253 Special Methods of Instruction II (Fa) Study of the methods and materials in the special content areas. The focus is on student-centered and interdisciplinary teaching strategies. Extended content units are developed and implemented in the partnership school setting. Prerequisite: Admission to the M.A.T. program.

CIED5262 Special Methods of Instruction III (Sp) Study of the methods and materials in the special content areas. The focus is on student-centered and interdisciplinary teaching strategies. Extended content units are developed and implemented in the partnership school setting. Prerequisite: Admission to the M.A.T. program.

CIED5263 Measurement and Evaluation (Sp, Su, Fa) A study of measurement, testing, and evaluative procedures including types of tests, abuses of tests, test construction, scoring, analysis and interpretation, study skills, and alternative evaluation and assessment techniques. Prerequisite: Admission to the M.A.T. program.

CIED5273 Research in Curriculum and Instruction (Sp, Su, Fa) An advanced course in inquiry and research in curriculum and instruction. It examines the principles, strategies, and techniques of research, especially qualitative inquiry. Qualitative method in assessment and evaluation are considered. Practicum in research and evaluation in the special content area of the class. Prerequisite: Admission to the M.A.T. program.

CIED528V Secondary Cohort Teaching Internship (Irregular) (1-6) May be repeated for up to 6 hours of degree credit.

CIED5293 Special Methods, Interdisciplinary Section (Sp)
The third and final part of the middle level special methods course for teaching in the interdisciplinary high school. Focuses on methods and skills for developing an interdisciplinary course of study in conjunction with the members of their interdisciplinary team. Prerequisite: CIED 5092 and CIED 5913 and admission to the M.A.T. program.

CIED5303 Adolescence and Learning (Irregular) Study of the developmental characteristics (physical, emotional, social and intellectual) of early and late adolescence (ages 10-18; grades 5 to 12). The progression from early to late adolescence and the implications this evolution has for learning, motivation, instruction and classroom practices are emphasized. Prerequisite: PSYC 2003.

CIED532V Practicum in Special Education (Irregular) (1-6) Supervised field experiences in special education programs, schools, institutions, and other facilities for exceptional children.

CIED5343 Analysis of Behavior for Teachers (Sp) An advanced course in managing behaviors in students with exceptionalities. Students are provided with experiences in applying theoretical bases of classroom management through identifying, assessing, graphing, and analyzing behavioral data and implementing management plans. Ethical issues in the use of functional analysis are addressed. Prerequisite: Admission to the M.A.T. program.

CIED5353 Teaching Students with Diverse Needs in Middle Education (Su) Designed for future scholars who wish to teach and to participate in classroom activities. Additionally, candidates will research some area of their own pedagogy relevant to the experience. Prerequisites: Admission to the M.A.T. program.

CIED5357 Foundations of Literacy (Sp, Su, Fa) Teaching of reading to children; techniques, research, and modern practices.

CIED5583 Content-Based Reading Process (Irregular) The different methods and materials is emphasized through a student centered approach to the reading process. Learning theory and research are related to reading instruction and materials through the development and application of evaluative criteria based on an understanding of reading process. Prerequisite: CIED 5573.

CIED5593 Advance Diagnosis and Intervention (Irregular) Emphasizes the diagnosis and remediation of reading difficulties in the classroom setting. Students are expected to become familiar with cause of reading failure, diagnosis instruments and procedures, principles of report writing, and corrective instructional methods and materials. The course is open to graduate students with instructor’s consent. Enrollment limited to 15 students. Prerequisite: CIED 5573.

CIED5603 Innovations in School Education (Sp, Su, Fa) An examination of the change process in education with emphasis on those elements which support or hinder change in this process. The course involves an analysis of the teacher’s role in dealing with current concerns in these areas.

CIED5623 The School Curriculum (Sp, Su, Fa) General principles and techniques of selecting and organizing curricular material. Prerequisites: Admission to the M.A.T. program.

CIED5633 Analysis of Instruction (Sp) A survey of the research and literature related to the systematic study of the field of teaching. An examination of the definitions of teaching and instruction and the criteria for evaluating teaching performance. A study of the implications of the research of effective teaching and the key curricular and instructional issues.

CIED564V Science Instructional Strategies (Irregular) (1-6) Methods and materials in teaching specific science content with a focus on that content and/or the pedagogical perspectives necessary for effective and engaging instruction. May be repeated for up to 6 hours of degree credit.

CIED5653 Methods of Instruction for Middle School (Su) Philosophy, rationale, and instructional practices of middle school instruction. Prerequisite: Graduate standing.

CIED567V Teaching Foreign Cultures in Social Studies (Su, Sp, Fa) An exploration of teaching foreign cultures (West Europe, USSR, China, Latin America) and methods of teaching about them in secondary school social studies.

CIED5683 Adolescent Literature (Sp, Su, Fa) Content course in adolescent literature including selection, reading, evaluation, and psychological basis of classic and contemporary works. Prerequisite: PSYC 3093 or equivalent.

CIED5703 English Language Arts and Reading Standards: Contents, Language (Irregular) This course will (1) examine the purposes, contents, and quality of K-12 English language arts and reading standards, (2) analyze their relationship to classroom and school district curricula, student assessment, educator licensing regulations, licensure tests, professional development, (3) and explore educational, social, and political issues raised by ELAR standards.

CIED5713 Integrating the Elementary Curriculum (Su) This course focuses on the meaningful integration of science, mathematics, literacy, social studies, art, and music in the elementary classroom. A strong foundation for integrating the elements of the curriculum will be developed by providing students with theoretical frameworks, research, Desires, and methods related to classroom practice. Strategies to coordinate the integration of these subject areas for the K-4 classroom will be developed.

CIED5723 Nature and Needs of Persons with Mild Disabilities (Fa) Educational, psychological, and social characteristics of individuals who have mild disabilities with emphasis on education and strategies for teaching and working with mild exceptions. Prerequisite: Admission to the M.A.T. program.

CIED5733 Inclusive Practices for Diverse Populations (Su) An advanced study of the characteristics of persons with exceptional learning needs and the provision of appropriate transformative-gerative (universal grammar). It includes approaches to the teaching of all types of grammars. Prerequisites: Admission to the M.A.T. program.

CIED5757 Teaching Internship/Accept Research (Irregular) During this course, Master's candidates will be provided with classroom time to prepare to teach and then will be assigned to a classroom or classrooms. During this time the candidates will have the opportunity (under supervision) to teach and to participate in classroom activities. Additionally, candidates will research some area of their own pedagogy relevant to the experience. Prerequisites: Admission to the M.A.T. program.

CIED5763 Supervised Field Experience in Special Education (Sp, Su) A supervised field experience in special education for the M.A.T. program.

CIED5773 Integrating the Elementary Curriculum (Su) This course focuses on the meaningful integration of science, mathematics, literacy, social studies, art, and music in the elementary classroom. A strong foundation for integrating the elements of the curriculum will be developed by providing students with theoretical frameworks, research, Desires, and methods related to classroom practice. Strategies to coordinate the integration of these subject areas for the K-4 classroom will be developed.

CIED5783 Nature and Needs of Persons with Mild Disabilities (Fa) Educational, psychological, and social characteristics of individuals who have mild disabilities with emphasis on education and strategies for teaching and working with mild exceptions. Prerequisite: Admission to the M.A.T. program.
search in special education including all of areas of exceptionally with emphasis on diagnosis and classification. CIED56892 Orchestration and Administration of Special Education (Irregular) Procedures, responsibilities and problems of organization, administration, and supervision of special education programs. CIED59232 Piaget’s Theory and Instruction (Odd years, Sp) Piaget’s theory has been applied to classroom instruction in various settings. This course will investigate the theory in depth, study classroom application, and students will devise a plan/program. Prerequisite: CIED 6033.

CIED56131 Trends and Issues in Social Studies Education (Odd years, Sp) Analysis of social studies education including an examination of the historical, political and social issues that have shaped the social studies and the role in the increasingly complex endeavor to prepare future citizens. CIED56233 Organization of Reading Programs (Sp, Su, Fa) Study of the problem of organizing the classroom, individual school, and school system, for the improvement of reading instruction. Emphasis is given to the development of program organization rationale based on requirements of the teaching-learning setting. CIED56313 Issues, History, and Rationale of Science Education (Irregular) This course is the foundation experience for those interested in the discipline of science education. It provides an overview of the fundamental issues in and vocabulary of science education. The course fulfills the requirements for science teaching, the literature of science education, and the issues and controversies surrounding the teaching of science.

CIED56333 Nature of Science: Philosophy of Science for Science Educators (Irregular) The Nature of Science is a hybrid arena consisting of aspects of the philosophy, history and sociology of science along with elements of the philosophy of science that are targeted to complete understanding of how science actually functions. Prerequisite: Admission to grad school. CIED56434 Advanced Science Teaching Methods (Irregular) This course is designed for those educators who have had some previous instruction in science teaching methods and/or had some prior science teaching experience. Students will gain new or renewed perspectives with respect to their personal teaching ability while exploring activities designed to assist others in professional growth in science instruction. Prerequisite: Admission to graduate school. CIED56419 Special Topics in Special Education (Irregular) (1-6) Discussion and advanced study in select topics in special education. Specific focus on recent developments. May be repeated for up to 6 hours of degree credit. CIED56433 Legal Aspects of Special Education (Regular) A study of the legislation and litigation in special education, federal and state laws and court cases, and due process hearings. CIED56443 Mixed Methods Research (Sp) CIES56443 Mixed Methods Research (Sp) This course will provide opportunities for students to acquire the skills, knowledge, and confidence necessary to conduct a mixed methods research study. Emphasis is on developing research questions, developing a research design, selecting a sample, and utilizing appropriate techniques for analyzing data. CIED56503 Effective Teaching: Concepts and Processes (Sp) This course is designed to assist students in examining a variety of effective teaching practices and conditions found in classrooms and in acquiring knowledge, concepts, and ideas about ways to effectively influence the interests, learning and development of students. Prerequisite: Admission to the Ph.D. program. CIED56633 Problem-Based Learning and Teaching (Irregular) A course in the design, development, and delivery of the problem-based learning (PBL) model. Theoretical cases and curriculum models will be centered on issues and models related to PBL. CIED56633 Multicultural Education (Su) This course is designed to trace, examine, discuss, and promote understanding of issues related to multicultural education, different views of multicultural education, and the impact of multicultural education upon the schooling process. Emphasis is upon schooling experiences of culturally diverse students, language issues, gender issues, and evaluation issues. Prerequisite: Admission to the Ph.D. program. CIED5660V Workshop (Irregular) (1-18) May be repeated for up to 18 hours of degree credit. CIED5674V Internship (Sp, Su, Fa) (1-18) May be repeated for up to 18 hours of degree credit. CIED56803 Teaching Students with Autism Spectrum Disorders (Fa) This course provides students with an understanding of individuals who have been diagnosed with autism spec-

 Course Descriptions
tum disorders. The course provides a life-span perspective by focusing on preschoolers, school-aged children, and adults. Students explore topics related to characteristics of these individuals and general educational strategies for their education.

CLST686V Ed.S. Project (Sp, Su, Fa) (1-6) Instructor permission required. Prerequisite: Instructor permission.

CLST6813 Assessment of Students with Autism Spectrum Disorders (Sp) This course provides an in-depth study of the assessment of individuals with autism spectrum disorders. It includes formal and informal assessment measures used to assist in the identification of students with ASD, as well as provide information for program development for this group of students.

CLST6823 Instructional Methods for Students with Autism Spectrum Disorders (Fa) This course is designed to assist professionals in designing and implementing instruc- tional and support services for students with autism spectrum disorders. Students will learn how to participate in collabora- tive family, school, and community partnerships.

CLST6883 Practicum in Autism Spectrum Disorders (Sp, Su, Fa) Supervised field experiences in programs, schools, and other settings for children with autism spectrum disorders.

CLST6884 Basic Principles of ABA (Fa) Course provides in- formation on: (a) the philosophical assumptions and principles of behavior analysis; (b) basic principles, processes, and con- cepts of applied behavior analysis; and (c) ethical and legal issues involved in the use of ABA.

CLST6887 Behavioral Assessment in ABA (Fa) Course content includes information on effective methods and the de- velopment of skills: (a) assessing, organizing, and interpreting behavior; (b) conducting task analysis and selecting interven- tion goals and strategies; (c) displaying data; and (d) making evidence-based decisions on the use of ethical and effective strategies. All course assignments will be reviewed and applied to behavioral change procedures used.

CLST6889 Behavior Change Procedures and Supports (Bu) Course content includes (a) information on behavior change procedures; (b) activities designed to acquire skill in developing and evaluating behavioral change programs; and (c) information and activities designed to acquire skills in pro- viding and monitoring persons and systems providing support. Legal and ethical standards will be reviewed and applied to the course content.

CLST6893 Measurement and Experimental Design (Sp) Course content includes information on and the development of skills in: (a) the measurement of the multiple dimensions of behaviors; (b) the use of methods of measuring behavior; (c) the experimental evaluation of interventions; and (d) the mul- tiple methods of displaying and interpreting behavioral data. Legal and ethical standards will be reviewed and applied to the course content.

CLST6888 ABA Ethical, Professional, and Legal Standards (Fa) Course content includes information on the ethical, pro- fessional and legal standards in special education and, specifi- cally, the philosophical system and the ethics and values that underlie ABA. Students will complete the course requirements by focusing on the critical literature, professional guidance, and empirical research in the field of ABA.

CLST694V Special Topics (Sp, Su, Fa) (1-6) Discussion and experiential group experience is required. Prerequisite: CNED 5103 and CNED 5203 and CNED 5382. Analysis and application of short-term counseling practice; including client rights; confidentiality; the client- counselor relationship; and counseling research, training, and supervision. Prerequisite: CNED 5103 and CNED 5203.

CLST6943 Counseling Internship (Sp, Su) Supervised counseling practice. Pre or Co requisite: CEND 5303 and CNE 5363 and CND 5373. Prerequisite: CEND 5203, CND 5323, CEND 5333, CND 5403. CND 5363 and CEND 5323.

CLST5733 Ethical and Legal Issues in Counseling (Fa) (Formerly CEND 5373) Review of ethical and legal standards for professional counselors. In addition, the course is designed to provide introductory level concepts and skills required for future certification and licensure as counseling professionals. Prerequisite: Graduate student status.

CNED5203 Foundations of the Counseling Profession (Su, Fa) A study of the counseling profession applicable to school, college and community agency settings. Introduction to the ba- sic educational, historical, philosophical foundations of coun- seling as well as specific traits and skills of counselors. The course is also designed to provide beginning level concepts and skills required for certification and licensure. Prerequisite: Must be taken first year in program.

CNED5213 Lifestyle & Career Development (Su) Theories of career development and counseling, including the use of occupational information sources and career assessment tools and techniques. Prerequisite: CEND 5333 (preferred)

CNED5233 Individual Assessment (Sp) Content includes an in-depth study of the ethical, professional, and curriculum development goals and strategies for effective management of counseling services.

CNED5233 Program Organization and Information Management (Fa) Study of client information needs and strategies for effective management of counseling services.

CNED5233 Counseling Theory (Su, Fa) Introductory survey and critical analysis of major theoretical perspectives in counseling.

CNED5353 Career Counseling Techniques (Sp, Fa) Intro- duction to basic counseling techniques and skills common to multiple theoretical perspectives. Prerequisite: CEND masters student or instructor Permission.

CNED5343 Counseling Seminar (Sp, Fa) Supervised counseling practice. Pre or Co requisite: CEND 5303 and CNE 5363 and CND 5373. Prerequisite: CEND 5203, CND 5323, CEND 5333, CND 5403. CND 5363 and CEND 5323.

CNED5353 Psychopathology (Su) Study of theory, research, & practice issues pertaining to psychopathol- ogy for non-medical practitioners. Prerequisite: CEND 5203, CND 5323, CEND 5363.

CNED5363 Dynamics of Group Counseling (Sp, Fa) Thera- peutic and other theoretical information is presented regard- ing group process and the counselor's role in that process. An introductory study of group counseling experience is required. Prerequisite: CEND 5333 and CEND 5323.

CNED5373 Ethical and Legal Issues in Counseling (Fa) (Formerly CEND 5373) Review of ethical and legal standards for professional counselors. In addition, the course is designed to provide introductory level concepts and skills required for future certification and licensure as counseling professionals. In addition, the course is designed to provide introductory level concepts and skills required for future certification and licensure as counseling professionals. Prerequisite: CEND 5103 and CND 5203.

CNED5383 Crisis Intervention Counseling (Su) (Formerly CEND 5382) Analysis and application of short-term counseling intervention strategies in crisis situations, with special atten- tion to incidents involving rape, physical, or emotional abuse, divorce, suicidal depression, grief, marital or family instability, and violent conflict. Prerequisite: CEND 5333 (preferred)

CNED5403 Case Management and Counseling (Fa) (Pro- ceed in case management utilizing both clinical and interview data in assisting children, adolescents, and adults in educa- tional, vocational, personal, and social planning. Prerequisite: CEND 5303 and CND 5323 and CND 5333.

CNED5513 Counseling and Human Diversity (Su) Exam- ination of human and cultural diversity, emphasizing issues of race, class, and socioeconomic status, and how they impact our clients as individuals and as family and society members.

CNED574V Counseling Internship (Sp, Fa) (1-3) A supervised counseling experience over a minimum of two continuous semesters. Co or Prerequisite: CEND 5213. Prerequisite: CEND 5203, CEND 5303, CEND 5323, CEND 5333, CND 5343, CEND 5363, CEND 5373, CND 5403, and CND 5433. CEND 5363 and CEND 5323. Faculty consent required. May be repeated for up to 3 hours of degree credit.

CNED5700 Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy

---

Criminal Justice (CMJS)

CMJS2003 Introduction to Criminal Justice (Sp, Fa) Survey of the field of criminal justice, with an emphasis upon law enforcement, the courts, and corrections.

CMJS2003 Introduction to Criminology (Sp, Fa) Examination of the extent of crime in America, patterns of criminal be- havior, and the causes of criminality.


CMJS2053 Critical Thinking and Writing in Criminal Jus- tice (Irregular) An introduction to methods of critical thinking and writing in criminal justice. Prerequisite: CMJS 2003; open to majors only.

CMJS2151 Criminal Investigation (Sp) Survey of the theo- ries, concepts, and legal conditions concerning the techniques used in the location, preservation and presentation of evi- dence. Prerequisite: CMJS 2003.

CMJS3023 Criminology (Sp, Su, Fa) A survey of theories of crime causation, development of law, corrections, victimiza- tion, and police and policy. Prerequisite: SOCI 2013 or SOCI 2033. (Same as SOCI 3023)

CMJS3043 The Police and Society (Sp, Fa) Origins, devel- opment, and practice of policing, with an emphasis on police organization, problems, and issues in contemporary society. Prerequisite: CMJS 2003.

CMJS3020 Corrections (Fa) A study of the origins, develop- ment, and practices related to corrections, including incarcera- tion, community corrections, and intermediate sanctions. Prerequisite: CMJS 3020. (Same as SOCI 3023)

CMJS3050 Criminal Procedures (Fa) Legal principles of police work, including arrests, force, interviewing, search and seizure. Prerequisite: CMJS 2003.

CMJS3513 Criminal Evidence (Sp) Examination of how criminal evidence is collected by police and used by prosecu- tors and defense attorneys within a constitutional framework. Prerequisite: CMJS 2003. (Same as SOCI 3513)

CMJS399V Honors Course (Sp, Fa) (1-6) May be repeated for up to 12 hours of degree credit.

CMJS4003 Internship in Criminal Justice (Sp, Su) Super- vised experience in principal, county or state criminal justice agency, or any other agency which is approved by instructor. Prerequisite: CMJS 2003.

CMJS4013 Special Topics in Criminal Justice (Sp, Su) Super- vised experience in: (a) the study of a topic, whether it be a principal, county or state level criminal justice agency, or any other agency which is approved by instructor.


CMJS4053 Homeland Security (Irregular) An introduction to homeland security and the intelligence community, focusing on how counterterrorism data is collected and used, emerging threats, and balancing civil liberties with domestic intelligence gathering. Prerequisite: CMJS 3023.

CMJS4113 Terrorism and Social Control (Irregular) Exa- mination of the causes, consequences, and counterterror- ism policies affecting terrorism committed against Americans, whether domestic or international. Prerequisite: CMJS 2003. (Same as SOCI 4113)
Course Descriptions

CNED599V Seminar (Irregular) (1-6) May be repeated for up to 6 hours of degree credit.

CNED5003 Counseling and Addictions (Su) A study of behavioral and substance additions, including an overview of differential treatment. Prerequisite: CNED 5323 and CNED 5333 and CNED doctoral or masters standing or permission.

CNED6690V Master's Thesis (Sp, Su, Fa) (1-4)

CNED6013 Advanced Counseling Theory and Methods (Even years, Sp) Critical analysis of major theoretical perspectives in counseling, including both group and individual counseling theories, for dealing with affective, cognitive, and behavioral dysfunction. Prerequisite: CNED doctoral standing or permission.

CNED6023 Foundations of Marriage and Family Counseling (Odd years, Su) A study of the historical, theoretical, and empirical bases for marriage and family counseling. Prerequisite: CNED 5323 and CNED 5333 and CNED doctoral or masters standing or permission.

CNED6033 Advanced Theory and Methods (Odd years, Sp) Comparative study of theories and processes of group counseling. Includes supervised experience in group facilitation with video recording and playback. Prerequisite: CNED 5963 or equivalent and CNED doctoral or masters standing or permission.

CNED6043 Supervision of Counselors (Even years, Fa) Analysis, assessment, and practical application of counselor supervisory skills. Emphasis on client treatment and training programs. Prerequisite: CNED doctoral standing and CNED faculty consent.

CNED605V Independent Study (Sp, Su, Fa) (1-18) May be repeated for up to 18 hours of degree credit.

CNED6073 Research in Counseling (Odd years, Sp) Review and analysis of research in counseling. Prerequisite: CNED doctoral standing or permission.

CNED6103 Consultation Theory and Methods (Su) Strategies, practical application, and techniques for effective consultation with parents, teachers, and community agencies. Prerequisite: CNED 5333 (preferred) CNED doctoral or masters standing or permission.

CNED6093 Counseling Children and Adolescents (Sp) Introduction to counseling children and adolescents including the process, theories, techniques, and materials applicable to children and youth in a pluralistic society. Prerequisite: CNED 5323 and CNED 5333 and CNED doctoral or masters standing or permission.

CNED6123 Clinical Applications of Marriage and Family Counseling and Therapy (Odd years, Fa) To provide clinical experiences in pedagogy relevant to multicultural issues and competencies, including social change theory and advocacy action planning. To identify current multicultural issues as they relate to social change theories, ethical and legal considerations, disability, gender, sexuality, social justice, and advocacy models. Prerequisite: CNED or RHAB Doctoral Standing or Permission.

CNED6413 Advanced Individual Appraisal (Odd years, Fa) To provide advanced knowledge and experience with those psychoeducational instruments and procedures used in conducting school related assessment. Prerequisite: CNED 5303 and CNED 5413 or equivalent and CNED doctoral standing or permission.

CNED6711 Advanced Counseling Practicum (Sp) Supervised counseling practice. A 100-clock hour approved practical counseling experience. Prerequisite: CNED doctoral standing. Permission: CNED faculty and Clinical Coordinator. May be repeated for up to 3 hours of degree credit.

CNED674V Internship (Sp, Su, Fa) (1-18) Supervised field placement (Clinical/Instructorship/Supervision/Research). Prerequisite: CNED 5323 and CNED 5333 and CNED doctoral or masters standing or permission.

CNED699V Seminar (Su) (1-18) Prerequisite: CNED Doctoral standing or permission. May be repeated for up to 18 hours of degree credit.

CNED700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy and consent.

COMM1003 Basic Course in the Arts: Film Lecture (Sp, Su, Fa) Introduction to film as entertainment and art. How to look at film through a study of composition, lighting, editing, sound and acting. Lectures and viewing time. Prerequisite: Drill component.

COMM1003H Honors Basic Course in the Arts: Film Lecture (Sp, Su, Fa) Introduction to film as entertainment and art. How to look at a film through a study of composition, lighting, editing, sound and acting. Lectures and viewing time. Corequisite: Drill component.

COMM1093 Communication in a Diverse World (Sp, Fa) Introductory course that focuses on the skills and understandings associated with competent communication in a diverse society within interpersonal, group, organizational and inter-cultural communication contexts.

COMM1233 Media, Community and Citizenship (Sp, Fa) Examines theory and research on how messages are processed, meanings constructed, communities formed and maintained through the mass media. Focus is on critical citizenship and media literacy in the context of the cognitive, social, cultural, political, and economic consequences of increasingly networked media systems.

COMM1313 Public Addresses in Nlp, Su, Fa Application of the communication techniques needed to organize and deliver oral messages in a public setting. Emphasis given to theory and practice of message strategies and preparation, audience analysis, presentation, nonverbal, multimedia support, speech criticism, and the listening process.

COMM1313H Honors Public Speaking (Sp, Su, Fa) Application of the communication techniques needed to organize and deliver oral messages in a public setting. Emphasis given to theory and practice of message strategies and preparation, audience analysis, presntational skills including multimedia support, speech criticism, and the listening process.

COMM2323 Introductions to Social Group Communication (Sp, Su, Fa) Application of the communication techniques needed to organize and deliver oral messages in a public setting. Emphasis given to theory and practice of message strategies and preparation, audience analysis, presntational skills including multimedia support, speech criticism, and the listening process.

COMM2323H Honors Public Speaking (Sp, Su, Fa) Application of the communication techniques needed to organize and deliver oral messages in a public setting. Emphasis given to theory and practice of message strategies and preparation, audience analysis, presntational skills including multimedia support, speech criticism, and the listening process.

COMM3223 Interpersonal Communication (Sp, Su, Fa) Personal and interpersonal factors affecting communication in everyday life. Emphasis upon ways in which interpersonal perception, physical environment, semantic choices, and nonverbal cues affect meaning in the context of work, family, and other personal experiences.

COMM3233 Introduction to Communication Research (Sp, Fa) Introduction to the basic assumptions underlying communication research. Emphasis upon methods of data collection in communication research; and techniques for organization, interpretation, reporting, and evaluation of communication research.

COMM3243 Introduction to Small-Group Communication (Sp, Su, Fa) An introduction to procedures used in exchanging information, solving problems, determining policies, and resolving differences in committees and other small groups.

COMM3273 Introduction to Debate (Irregular) An introduction to the basic principles and procedures of debate as an instrument of critical choice and decision.

COMM3282 Intercolligate Forensics (Irregular) Preparation and participation in public debates and other forensic activities. No more than 6 hours of credit in COMM 2382 and 3282 may be applied to the departmental requirement. (A maximum of 12 hours in COMM 2382 and 3282 hours of credit) Prereq: or Corequisite: COMM 2373. May be repeated for up to 6 hours of degree credit.

COMM3613 Nonverbal Communication (Irregular) Creates an understanding of nonverbal communication in human communication processes and develops familiarity with recent research in the field of nonverbal communication.

COMM3613 Prerequisite: COMM 1313.

COMM3913 Internship to Electronic Media (Fa) Introduction to the industries centered around electronic media, including radio, broadcast and cable television, telephony, computer information systems, and digital media. Emphasis on the history, nature, development and critical development functions of the media. Pre or Corequisite: COMM 1323.

COMM398V Topics in Communication (Irregular) (1-3) Topics in communication not represented in other lower division courses. Prerequisite: Completion of at least 3 hours of COMM coursework.

COMM3993 Language and Expressive Culture This course explores the complex interrelationship of language, culture, and social identity. Verbal art and expressive culture are examined from a variety of anthropological perspectives. Topics include: folkways, speech genres, cultural performances, and the performatve aspects of oral expression. (Same as ANTH 3143,ENGL 3143)

COMM3173 Introduction to Linguistics (Irregular) Introduction to language study with stress upon modern linguistic theory and analysis. Data drawn from various languages reveal linguistic universals as well as phonological, syntactic, and semantic systems of individual languages. Related topics include language and the relation to culture and society, and the history of linguistic scholarship.

Prerequisite: Junior standing. (Same as ANTH 3173,ENGL 3173,MLC 3173)

COMM3263 African Americans in Film (Irregular) A survey of the history of images of African Americans in film, especially as these images are examined in the context of stereotypical renditions and/or realistic representations of African American experiences. Issues of African American history, culture, and socio-political context will be addressed in the analyses of these films.

Prerequisite: ENGL 1023. COMM 1003, and advanced standing. (Same as AAST 3263,ENGL 3263, JOUR 3263)

COMM3282 Advanced Forensics (Irregular) A continuation of COMM 2382 and COMM 3282 may be applied to the departmental requirement. (A maximum of 12 hours in COMM 2382 and 3282 hours of credit) Prereq: COMM 2382. May be repeated for up to 6 hours of degree credit.

COMM3333 Communication Criticism (Irregular) Basic elemeents of the theoretical perspectives on criticism of public communication. Extensive practice in written analysis of events in public address, film, television, and other mass media.

Prerequisite: COMM 1323.

COMM3343 Contemporary Communication Theory (Sp) Study of the nature of the communication process as it is reflected in the individual, in interpersonal settings, in one-to-many situations, and in the mass media. Prerequisite: COMM 1313. (Same as COMM 2323 or permission of instructor.)

COMM3353 Argumentation: Reason in Communication (Fa) Concepts characterizing rational discourse, with a concern for examining validity and fallacy. Consider traditional and contemporary models for argumentation, including an examination of the philosophy of argument and a practical inquiry into the uses of argument in contemporary rhetorical discourse.

Prerequisite: COMM 1313.

COMM3357 Science Fiction Film (Irregular) This class concentrate on science fiction in various communication media influences and is, in turn, influenced by broad features of cultural life. The class considers the impact of science fiction on science fact, the military, space travel, religion, race, gender, social class, education, politics, technology, and fashion styles.

Prerequisite: COMM 1003 and COMM 1233.

COMM3363 Family Communication (Irregular) Study of the nature, functions, and management of communication patterns in the family. Focus is on understanding routine interpersonal interactions, conflict patterns, authority structures, and decision-making processes within the context of the contemporary family. Prerequisite: COMM 2323 and 3233.

COMM3443 Introduction to Rhetorical Theory (Irregular) Interpretive critical-study of rhetoric in public contexts. Prerequisite: COMM 1313.

COMM3473 Popular Communication and Culture (Su) This course is an introduction to basic theories and topics of Popular Communication and Culture studies. The course will emphasize understanding popular media communication forms. Prerequisite: COMM 2323 and 3233.

COMM3673 Mediated Communication (Sp, Fa) Focuses on media messages and their social/cultural effects. Includes a critical examination of media institutions and the ways they serve as means of communication, as well as ways people construct meaning from messages, media's influence on attitudes, media's role in cultural life, and audiences as critical consumers of media.

Prerequisite: COMM 1233 and COMM 2813.
COMM3703 Organizational Communication (Fa) An introduction to the theory, processes, and management of communication within work organizations. Prerequisite: COMM 1023 and COMM 1313.

COMM3763 Health Communication (Fa) Examines communication within health care organizations and teams. Issues may include provider communication, communication among health care professionals, negative consequences of poor communication in health care delivery, and the use of technology in health-related information dissemination and campaign. Prerequisite: COMM 1023.

COMM3883 Rhetoric of Social Movements (Irregular) Study of the functions of rhetoric as it appears in the context of social movements such as American independence, women's equality, civil rights, and new conservatism. Prerequisite: COMM 1313.

COMM3923H Honors Colloquium (Irregular) Treats a special topic or issue, offered as part of the honors program. Prerequisite: Honors candidacy (not restricted to candidacy in communication). May be repeated for credit.

COMM3983 Special Topics (Sp, Fa, Su) Communication topics which are not usually presented in depth in regular courses. May be repeated for credit. Prerequisite: At least 3 hours of COMM coursework.

COMM3999V Honors Course (Sp, Fa, Su) (1-6) Prerequisite: Junior standing. May be repeated for up to 12 hours of degree credit. Topics may be offered in rhetoric with emphasis upon the development of rhetorical theory in the classical world and upon contributions of contemporary theorists. Prerequisite: Graduate standing. May be repeated for up to 3 hours of degree credit.

COMM4113 Legal Communication (Fa) Examines communication processes in the legal environment and focuses on communication skills and behaviors among judges, attorneys, litigants, and juries. Prerequisite: COMM 1023 or permission of instructor.

COMM4413 Language and Society of Japan (Fa) Prerequisite: COMM 1313 or permission of instructor. May be repeated for credit. This course focuses upon the fieldwork procedures and critical analysis of language in Japanese society.

COMM4414 Intercultural Communication (Su) Study of the nature and function of the communication process as it operates in the political environment. (Same as PLSC 4373)

COMM4413 Communication, Negotiation, Mediation and Conflict (Irregular) Examines Alternative Dispute Resolution (ADR) process, especially as it involves issues of negotiation and mediation. Supplements and extends material presented in COMM 4323 (Communication and Conflict). Explores the verbal and nonverbal messages occurring during mediation, negotiation, and conflict, and the psychological, ethical, and legal, as well as the legal, counseling environments. Prepares students for roles involving negotiation and mediation.

COMM4423 Relational Communication (Sp) Review of the major theories and concepts in a relational approach to interpersonal communication. Provides exposure to a sampling of the research findings in relational communication. Prerequisite: COMM 2323 or permission of instructor.

COMM4433 Historical Development of International Film I (Irregular) A critical survey of international film as a distinctive art form and as a medium of expression and communication with attention given to films and cinema from 1895 to 1918. Prerequisite: COMM 1313.

COMM4443 Environmental Communication (Irregular) Explores how communication is used by individuals, corporations, and governments to shape public debates about environmental issues. Topics include rhetorical strategies, the public’s right to information and input, dispute resolution techniques, advocacy campaigns, and green marketing. Prerequisite: COMM 1313 and COMM 1313 and COMM 2323 or permission of instructor.

COMM4453 International Film II (Irregular) A critical survey of international film as a distinctive art form as a medium of expression and communication with attention given to films and cinema from 1918 to 1975. Prerequisite: COMM 1313.

COMM4463 Documentary Film (Fa) A study and analysis of the documentary film as a discrete form and as an important contribution to the international cinematic scene. Prerequisite: Advanced standing. (Same as ENGL 4143)

COMM4483 Telecommunication Policy (Irregular) Re-examination of the field of telecommunications policy and the regulation of communication. Prerequisite: COMM 1023 or COMM 1313 or permission of instructor.

COMM4493 Special Problems (Sp, Fa) (1-6) Credit arranged. Prerequisite: COMM 2333 and at least 9 hours of COMM coursework. May be repeated for up to 6 hours of degree credit.

COMM4543 Television and American Culture (Fa) Historical and critical study of how television shapes American culture and is shaped by it. Attention will be given to the study of television history, programs and audiences; particularly how race and gender shape content and reception of programming. Prerequisite: COMM 1313 and COMM 2813.

COMM5113 Internship in Communication (Sp, Su, Fa) Internship in applied communication within public and private organizations. Prerequisite: Junior standing and completion of 18 hours in communication courses. May be repeated for up to 6 hours of degree credit.

COMM5113 Internship in Communication (Sp, Su, Fa) Internship in applied communication within public and private organizations. Prerequisite: Junior standing and completion of 18 hours in communication courses. May be repeated for up to 6 hours of degree credit. May be repeated for up to 6 hours of degree credit.

COMM5111 Colloquium in Communication Research (Sp, Fa) Presentation, evaluation, and discussion of research proposals or on-going research projects. Graduate students are encouraged to develop a research project which is required to be presented and evaluated. Credit may be repeated for credit.

COMM5113 Historical and Legal Methods in Communication (Fa) Emphasizes the assumptions and procedures of historical and legal research methods in communication. May be repeated for up to 3 hours of degree credit.

COMM5413 Ethnographic Research Methods in Communication (Fa) Emphasizes the assumptions and procedures of social scientific research methods in communication.

COMM5433 Media Processes & Effects (Fa) Introduction to the major theories and research in media processes and effects. Particular attention will be devoted to the impact of media messages on individuals and societies. Emphasis will be placed on the construction and development of theory. Prerequisite: COMM 4323 (Communication and Conflict) or permission of instructor. (Same as COMM 4343).
COMM5453 Myth and Communication Criticism (Irregular) Seminar in major theories of mythology, including archetypal and ideational perspectives, and their applications to the criticism of public communicative events. Practice in written critical analysis. Prerequisite: Graduate standing.

COMM5463 Descriptive Linguistics (Fa) A scientific study of language, including current theoretical approaches to cultural studies. Subsequent courses continue developing problem solving techniques by examining major theories and lines of research that examine family communication in contemporary American life.

COMM569V Seminar in Film Studies (Irregular) (1-3) Research, discussion; papers on a variety of film genres and areas including the new American film, the science-fiction film, directors, film comedy, the experimental film, criticism, and the film musical. (Same as ENGL 569V) May be repeated for up to 6 hours of degree credit.

Computer and System Problems (Sp, Su, Fa) (1-6) Credit by arrangement. Prerequisite: Graduate standing. May be repeated for credit.

COMM5913 Internship in Communication (Sp, Su, Fa) Internship in applied communication within public and private organizations. Prerequisite: 15 hours graduate level communication in residence.

COMM5993 Readings In Cultural Studies (Irregular) Classic and current theoretical approaches to cultural studies. Subject matter changes depending on student interest and faculty expertise.

CSCE600V Master's Thesis (Sp, Fa) (1-6) Prerequisite: Graduate standing.

Computer Science/Computer Engineering (CSCE)

CSCE2114 Digital Design (Fa) Introduction to the hardware aspects of digital computers, logic gates, flip-flops, reduction, minimization, and the MOS system design. Basic logic design, digital system design, software design tools, hardware description language (VHDL), and implementation technologies. Corequisite: Lab component. Prerequisite: MATH 2554. (Same as ELEG 2904)

CSCE2214 Software Engineering (Sp) An introduction to the relationship between computing hardware and software with a focus on the concepts for current computers. CPU design topics are covered including various techniques for microprocessor design and performance evaluation. Corequisite: Lab component. Prerequisite: CSCE 2114.

CSCE3193 Programming Paradigms (Fa) Programming in different paradigms with emphasis on object oriented programing and language integration in the UNIX environment. Synchronous and asynchronous concurrency, software validation. Prerequisite: CSCE 2014.

CSCE3313 Algorithms (Fa) Provides an introduction to formal techniques for analyzing the complexity of algorithms. The course surveys important classes of algorithms used in computer science and engineering. Prerequisite: CSCE 2014 and (MATH 2803 or MATH 2803).

CSCE3513 Software Engineering (Sp) A modern approach to the current techniques used in software design and development. This course emphasizes the use of modern software development tools, multi-module programming, and team design and engineering. Prerequisite: CSCE 2114.

CSCE3613 Operating Systems (Sp) An introduction to operating systems including topics in system structures, process management, storage management, files, distributed systems, network management, and concurrent systems. Prerequisite: CSCE 2214.

CSCE3953 System Synthesis and Modeling (Fa) This course instructs the students in the use of modern synthesis and modeling languages and approaches for design automation. This course covers use of HDLs and modeling languages for representing and implementing digital computer systems. Prerequisite: CSCE 2114.

CSCE4013 Special Topics (Irregular) Consideration of computer science topics not covered in other courses. May be repeated for up to 3 hours of degree credit.

CSCE4023H Honors Special Topics (Irregular) Consideration of current computer engineering honors topics not covered in other courses. Corequisite: Lab component. Prerequisite: MATH 2203 or MATH 2584 (Same as ELEG 4903).

CSCE4114 Embedded Systems (Fa) The architecture, software, and hardware of embedded systems. Includes a mixture of hardware and software for the control of a system (including electrical, mechanical, and chemical systems). They are found in a variety of products including cars, VCRs, HDTVs, cell phones, pacemakers, spacecraft, missile systems, and robots for factory automation. Corequisite: Lab component. Prerequisite: CSCE 2214.

CSCE4115H Honors Embedded Systems (Fa) The architecture, software, and hardware of embedded systems. Includes a mixture of hardware and software for the control of a system (including electrical, mechanical, and chemical systems). They are found in a variety of products including cars, VCRs, HDTVs, cell phones, pacemakers, spacecraft, missile systems, and robots for factory automation. Corequisite: Lab component. Prerequisite: CSCE 2214.

CSCE4123 Programming Challenges (Irregular) This course studies the principle methods used in the solution of programming contest problems, e.g., data structures strings, sorting, matrix arithmetic and algebra, combinatorics, number theory, backtracking, graph traversal graphs, algorithmic dynamic programming, grids, and computational geometry. Prerequisite: CSCE 2014.

CSCE4213 Computer Architecture (Sp) The architecture of modern scalar and parallel computing systems. Techniques for dynamic instruction scheduling, branch prediction, instruction level parallelism, shared and distributed memory multiprocessor systems, array processors, and memory hierarchies. Prerequisite: CSCE 2214.

CSCE4233 Low Power Digital Systems (Irregular) The reduction of power consumption is rapidly becoming one of the key technology trends. Computer system design has mainly focused on performance and area trade-offs. This course will provide a thorough introduction to digital design for lower consumption at the circuit, logic, and architecture levels. Prerequisite: CSCE 3513.

CSCE4253 Concurrent Computing (Irregular) Programming concurrent processes; computer interconnection network topologies; loosely coupled and tightly coupled parallelized computer architectures; designing algorithms for coarse, distributed computer architectures. Prerequisite: senior standing in computer science or engineering.

CSCE4323 Formal Languages and Computational (Sp) Topics include automata, formal languages, and computability of various regular expressions, context-free languages and pushdown automata, nondeterminisim, grammars, and Turing machines. Church’s thesis, halting problem, and un decidability. Prerequisite: CSCE 3313.

CSCE4333 Introduction to Integrated Circuit Design (Fa) Design and layout of large scale digital integrated circuits using CMOS technology. Topics include MOS devices and basic circuits, integrated circuit layout and fabrication, dynamic logic, circuit design and layout strategies for large scale CMOS circuits. Students may not receive credit for both CSCE 4333 and CSCE 5223. Prerequisite: ELEG 3213 or ELEG 3903 and MATH 2584 (Same as ELEG 4233). Prerequisite: ELEG 3213.

CSCE4333H Honors CPLD/FPGA-Based System Design (Irregular) Field Programmable Logic devices (FPGAs/CPLDs) have become extremely popular as basic building blocks for digital systems. They offer a general architecture that users can customize by introducing permanent or reversible physical changes. This course will deal with the implementation of logic options using these devices. Prerequisite: CSCE 2214. (Same as ELEG 4903).

CSCE4333H Honors CPLD/FPGA-Based System Design (Irregular) Field Programmable Logic devices (FPGAs/CPLDs) have become extremely popular as basic building blocks for digital systems. They offer a general architecture that users can customize by introducing permanent or reversible physical changes. This course will deal with the implementation of logic options using these devices. Prerequisite: CSCE 2214 and Honors standing.

CSCE4353 Computer Systems Modeling (Irregular) Basic concepts of problem analysis, model design, and simulation experiments. A simulation will be introduced and used in this course. Prerequisite: CSCE 2014 and (INEG 2313 or STAT 3013).

CSCE4433 Cryptography (Irregular) This course provides a general introduction to modern cryptography. Topics include: stream ciphers, block ciphers, message authentication codes, public key cryptography, key exchange, and digital signature schemes. Prerequisite: MATH 2603 or MATH 2803.

CSCE4523 Database Management Systems (Fa) Introduc- tion to database management systems, architecture, storage, query languages, SQL, ODBC, transaction management, integrity, and security. Prerequisite: CSCE 2014.

CSCE4543 Software Architecture (Irregular) A study of software architecture through the examination of real systems designed to solve real problems as well as managerial perspectives. Techniques for design- ing, building, and evaluating software architectures. Students cannot receive credit for both CSCE 4543 and CSCE 5543. Prerequisite: CSCE 3313 and CSCE 3513.

CSCE4561 Capstone I (Sp, Fa) CSCE students complete a comprehensive software capstone project during their final year of undergraduate studies. The project is done over 2 semesters in phases: concept, formal proposal, implementation, and presentation. The projects include and may require the integration of software and human factors and hardware elements and are developed to software engineering methodologies. Prereq- uisite: Corequisite: CSCE 3513.

CSCE4613 Artificial Intelligence (Irregular) Introduction to intelligent agents, AI languages, search, first order logic, knowledge representation, ontologies, problem solving, natural language processing, machine vision, machine learning, and robotics. Prerequisite: CSCE 2014.

CSCE4753 Computer Networks (Irregular) This course is an introductory course on computer networks. Using the Internet as a vehicle, this course introduces underlying concepts and principles of modern computer networks, with emphasis on protocols, architectures, and implementation issues. Prereq- uisite: Corequisite: CSCE 3513.

CSCE4813 Computer Graphics (Irregular) Introduction to the theory and algorithms used in computer graphics and applications. Topics include: 2D and 3D geometric mod-
els (points, lines, polygons, surfaces), affine transformations (rotation, translation, scaling), viewpoint calculation (clipping, projection), hidden surfaces (lighting, intersections, illumination, and shadow calculation). Students will implement their own graphics pipeline to demonstrate many of these techniques. Higher level computer graphics applications will be created. Prerequisites: CSCE 2014.

CSCE490V Individual Study (Irregular) (1-3) Individual study directed by faculty in current research topics, state of the art, or advanced methodology in one of the major computer science or computer engineering areas. May be repeated for up to 12 hours of degree credit.

CSCE4912H Honors Thesis (Sp, Fa) To provide honors students with experience in presenting their research accomplishments to a professional audience. Prerequisite: instructor's consent. May be repeated for up to 4 hours of degree credit.

CSCE4914 Advanced Digital Design (Irregular) To master advanced design concepts, including the design and testing of synchronous and asynchronous combinational and sequential circuits using state of the art CAD tools. Corequisite: Lab component. Prerequisite: CSCE 2114 or ELEG 2904. (Same as ELEG 4914)

CSCE4963 Capstone II (Sp, Fa) CSCE students complete a comprehensive capstone project during their final year of undergraduate studies. The project is done over two consecutive semesters in phases: concepts, formal proposal, implementation, and presentation. Topics include and are not limited to the integration of software, human factors, and hardware elements and are developed using software engineering methodology. Prerequisite: CSCE 4961.

CSCE4973 Advanced Programming Languages (Irregular) Abstraction, proof of correctness, functional languages, concurrent programming, exception handling, dataflow and object oriented programming, denotational semantics. Prerequisite: Graduate standing.

CSCE5013 Advanced Special Topics in Computer Science or Computer Engineering (Irregular) Consideration of current computer engineering or computer science topics not covered in other courses. May be repeated for up to 3 hours of degree credit.

CSCE5033 Advanced Algorithms (Irregular) Design of computer algorithms, with primary emphasis on the development of efficient solutions to algorithmic problems. Prerequisite: CSCE 3423 and CSCE 4613.

CSCE5053 Advanced Artificial Intelligence (Irregular) In-depth introduction to AI. Topics include: philosophical foundations, cognition, intelligent agents, AI languages, search, genetic algorithms, and modal logic. Inference, resolution, knowledge representation, ontologies, problem solving, planning, expert systems, probability, probabilistic reasoning, fuzzy logic, machine learning, natural language processing, machine vision, and robotics. Prerequisites: Graduate standing and CSCE 4613.

CSCE5203 Advanced Database Systems (Irregular) Topics include: object databases, distributed databases, XML query, data warehouses, network as database systems, peer-to-peer data sharing architectures, data grids, data mining, logic fusions, semantic databases, spatial and temporal databases, and knowledge bases. Prerequisites: CSCE 4203 and graduate standing.

CSCE5213 Bioinformatics (Irregular) Application of algorithmic techniques to the analysis and solution of biological problems. Topics include an introduction to molecular biology and recombinant DNA technology, biological sequence comparison, and phylogenetics, as well as topics of current interest. Prerequisite: Instructor consent. (Same as BENG 5213)

CSCE5223 Introduction to Integrated Circuit Design (Fa) Design and layout of large scale digital integrated circuits using CMOS technology. Topics include MOS devices and basic circuits, integrated circuit layout and fabrication, dynamic logic, circuit design, and layout strategies for large scale CMOS circuits. Students will receive credit for both CSCE 4223 and CSCE 5223. Prerequisite: ELEG 3212 or ELEG 3933 and MATH 2584.

CSCE5243 Advanced Formal Languages (Irregular) An advanced study of formal languages and automata. Prerequisite: CSCE 4223. Prerequisite: CSCE 5243.

CSCE5253L Integrated Circuit Design Laboratory I (Irregular) Design and layout of large scale digital integrated circuits. Students design, check and simulate digital integrated circuits which will be fabricated, and tested in I.C. Design Laboratory II. Topics include computer aided design, circuit timing, and layout and design rules. Prerequisite: CSCE 4933.

CSCE5263 Computational Complexity (Irregular) Turing machines, recursion theory and computability, complexity measures, NP-completeness, analysis on NP-complete problems, pseudopolynomial and approximation. Prerequisite: CSCE 4433.

CSCE5283 Graph and Combinatorial Algorithms (Irregular) A study of algorithms for graphs and combinatorics with special attention to computer implementation and runtime efficiency. Prerequisite: CSCE 4433.

CSCE5313 Advanced Operating Systems (Irregular) Concurrent processes and process communication; mutual exclusion and synchronization principles; kernel philosophy; resource allocation issues; implementation of basic facilities of specific operating systems. Prerequisite: CSCE 4433.

CSCE5322 Computer Security (Irregular) Study of a broad selection of contemporary issues in computer security. Topics include access control, security policies, authentication methods, secure system design, and information assurance. Prerequisite: CSCE 4433.

CSCE5333 Computer Forensics (Irregular) Various methods for identification, preservation, and extraction of electronic evidence at a computer crime scene. Specific topics include auditing and investigation of network and host intrusions, computer forensics tools, resources for system administrators and information technology professionals, and network security. Prerequisite: CSCE 5323.

CSCE5363L Integrated Circuit Design Laboratory II (Irregular) Students test the I.C. chips they designed in I.C. Design Laboratory I in an on-going verification and correction process. Prerequisites: CSCE 2114 or CSCE 4013. Topics include bipolar chip design, gate array, BIMOS, memory design, design for testability, and dynamic & dynamic logic. Prerequisite: CSCE 5253.

CSCE5433 Advanced Cryptography (Irregular) This course provides an in-depth look into some facet of either cryptographic theory or the implementation of cryptography. Topics may include: the discrete logarithm problem, integer factorization, information theory, elliptic curves, lattices, pseudo random number generators, zero-knowledge proofs, and quantum cryptography. Prerequisite: CSCE 4433 or instructor consent.

CSCE5533 Advanced Information Retrieval (Irregular) Study of the design and implementation of information retrieval and current information retrieval systems. Students will apply their knowledge of programming and data structures to implement a large system with an emphasis on efficiency and scalability. They will study current research in the field and implement individual or group projects on advanced topics. Students cannot receive credit for both CSCE 4553 and CSCE 5533.

CSCE5613 Telecommunications (Irregular) Overview of the telecommunication systems, traffic engineering, communications systems basics, information technology, electromagnetics, and data transmission. (Same as ELEG 5613)


CSCE5643 Computer Communications Networks (Irregular) A study of computer communications networks, including the data link layer, routing, flow-control, local area networks, TCP/IP, ATM, B-ISDN, queuing analysis, and recent developments in computer communications.

CSCE5653 Network Security (Irregular) This course introduces security and secrecy in a networked environment. It is intended to familiarize students with the elements of secure communication, and how they interact to provide secure networks in public and private settings.

CSCE5683 Digital Image Processing (Irregular) Introduction to digital image processing with an emphasis on practical implementation techniques. Applications include: image acquisition and sampling, image enhancement, noise removal, image restoration, image compression, and object detection. Fundamental methods include: point operations, geometric transformations, local image processing in the spatial and frequency domains, and non-linear image processing techniques. Basic techniques of linear system theory such as convolution and Fourier transforms will be introduced as necessary. Students will be expected to provide software implementation of these concepts and algorithms. Prerequisites: CSCE 5683. Prerequisite: CSCE 4213 and CSCE 4933.

CSCE5813 Server-Computer Computing (Irregular) Advanced Object Oriented methods for designing software systems for network applications. Topics include implementations of distributed objects using middleware, concurrent objectivity, Server-side programming, and reusable components.

CSCE581V Master's Project (Sp, Su, Fa) (1-6) Required course for report option.

CSCE5823 MultiProcessor Systems on Chip (Irregular) This course covers the latest trends in advanced computer architecture. Topics include multi-core architectures, memory hierarchies, and real-time systems. Topics covered may include: multicore architectures, modeling abstractions, run time systems, and MIMD/SIMD heterogeneous architectures. Prerequisite: CSCE 5613.

CSCE5843 Reconfigurable Computing (Irregular) This course will cover emerging and proposed techniques and issues in Reconfigurable Computing. Topics will include FPGA technologies, CAD/CAE tools, basic system level synthesis, programming models and abstractions. Prerequisite: CSCE 4213 and CSCE 3613.

CSCE590V Advanced Individual Study (Irregular) (1-3) Advanced graduate level individual study in current research topics, state of the art, or advanced methodology in one of the major computer science or computer engineering areas. This course provides sufficient theoretical and practical information to prepare the digital design engineer with an awareness of basic techniques for the realization of arithmetic circuits.

CSCE5983 Application Specific Integrated Circuit Design (Irregular) ASIC design is taught with emphasis on industrial practices. Topics include ASIC technologies, design entry, simulation, and synthesis. Advanced design methods and techniques are studied for cell based and gate array ASICs. Prerequisite: CSCE 4213 or ELEG 4943.

CSCE601V Master's Thesis (Irregular) CSCE602V Post-Master's Research (Sp, Fa) (1-18) CSCE701V Doctoral Dissertation (Sp, Su, Fa) (1-18)
CSES2203 Soil Science (Fa) Origin, classification, and physical, chemical, and biological properties of soils. Lecture 3 hours, discussion 1 hour per week. Corequisite: Drill component. Corequisite: CHEM 1103 or CHEM 1073.

CSES2303 Crop, Soil, and Environmental Sciences Colloquium (Fa) A communication-intensive course covering topics in agronomic and environmental soil, and water science with particular emphasis on communication by preparing and delivering oral presentations, writing communication, group activities, professionalism, ethics, problem solving, and information retrieval. A student-oriented class with collaborative participation. Colloquium workshops are held 3 hours per week. Corequisite: COMM 1313 and Junior or Senior standing only.

CSES3113 Forage Management (Even years, Sp) Forage crops for pasture, hay, and silage with reference to growth and development, production, nutritional quality, and grazing systems. Lecture 3 hours per week. Prerequisite: CSES 1203 or CSES 2103. Corequisite: Lab component. Prerequisite: CSES 2003.

CSES3214 Soil Resources and Nutrient Cycles (Odd years, Sp) Integration of the fundamental concepts of the biological, chemical, and physical properties of soil systems and their roles in managing soil resources. Lecture 3 hours, laboratory 3 hours per week. Pre- or Corequisite: BIOL 2013/2011L. Corequisite: Lab component. Prerequisite: CSES 2003.

CSES3312 Cotton Production (Even years, Fa) Principles and techniques associated with production of cotton. Rectification 2 hours per week. Prerequisite: CSES 1203 or CSES 2103 or HORT 2214. Corequisite: Lab component. Prerequisite: CSES 2003.

CSES3322 Soybean Production (Odd years, Sp) An overview of the history and utilization of soybean as well as the physiological and environmental basis for the development of economical soybean production practices. Rectification 2 hours per week. Prerequisite: CSES 1203 or CSES 2103 or HORT 1203.

CSES3332 Rice Production (Odd years, Fa) A study of the principles and practices involved in rice culture worldwide with major emphasis on the United States. Rectification 2 hours per week. Prerequisite: CSES 1203 or CSES 2103 or HORT 1203.

CSES3342 Cereal Grain Production (Even years, Sp) An overview of the botany, production, cultural practices, soil & climate relationships, and harvest of the major cereal grain crops. Prerequisite: CSES 1203 or CSES 2103 or HORT 1203.

CSES335V Soil Profile Description (Fa) Training for soil profile description writing and membership of judging teams. Lecture 3 hours, laboratory 2 hours a week. Prerequisite: CSES 2003. Corequisite: Lab component. Prerequisite: CSES 4143 and (BIOL 4303 or CHEM 5813).

CSES502V Special Problems Research (Sp, Su, Fa) (1-6) Original investigations on assigned problems in agronomy. Prerequisite: Graduate standing.

CSES5033 Advanced Soil Fertility and Plant Nutrition (Odd years, Sp) Advanced study of soil nutrient cycles, soil fertility, nutrient acquisition, translocation and metabolism in higher plants. Lecture 3 hours per week. Prerequisite: BIOL 4303 and CHEM 2613 and CHEM 261L.

CSES504V Special Topics (Irregular) (1-4) Topics not covered in other courses or a more intensive study of specific topics in agronomy. Prerequisite: Graduate standing. May be repeated for credit.

CSES5053 Scientific Writing (Fa) Open to graduate students, especially those in agricultural and life sciences. The course will cover searching the scientific literature, writing theses, proposals, journal articles, and other scientific documents. Emphasis is on clarity and techniques used in scientific publication. Lecture and workshop 3 hours per week. Prerequisite: Graduate standing.

CSES5103 Scientific Presentations (Fa) Experience in preparing and delivering presentations in oral and written forms. Graduate standing. Lecture 3 hours. Prerequisite: Graduate standing. May be repeated for credit.

CSES5244 Forage-Ruminant Relations (Odd years, Sp) Advanced chemical, physical, and botanical characteristics of forage plants, the dynamics of grazing, intake and digestion, and techniques of measuring forage utilization and systems analysis at the plant-animal interface. Lecture 3 hours per week. Prerequisite: ANSC 3143 and CSES 3113. (Same as ANSC 6253). Corequisite: CSES 5003 or CSES 5004. Corequisite: Graduate standing.

CVES2002 Introduction to Civil Engineering Plans and CADD (Sp, Fa) Development and preparation of design and construction plans; plan terminology and preparation; computer-aided drafting and design (CADD) software. Prerequisite: Civil Engineering major or departmental consent. Corequisite: CVEG 2014 and CVEG 2016. Corequisite: Basic principles of material behavior and problem solving sessions to reinforce principles of statics and mechanics of materials. Corequisite: CVEG 2004. Prerequisite: C or better in MATH 2564 and PHYS 2054.

CVES2004 Fundamentals of Mechanics for Civil Engi- neers (Sp, Fa) Laboratory exercises demonstrating basic principles of material behavior and problem solving sessions to reinforce principles of statics and mechanics of materials. Corequisite: CVEG 2014. Prerequisite: C or better in MATH 2564 and PHYS 2054.

CVES201L Surveying Systems Laboratory (Sp, Fa) Laboratory exercises demonstrating the principles and practices of surveying systems. Corequisite: CVEG 2003.

CVES205L Surveying Systems (Sp, Fa) Coordinate geometry, measurements, and total integrated surveying systems; total stations, electronic data collection, and reduction; error analysis and applications to civil engineering surveying practice. Pre- or Corequisite: MATH 2554. Corequisite: CVEG 2051L.

CVES3133 Structural Materials (Sp, Fa) Production, proper- ties, behavior, and structural applications of concrete, steel, timber, masonry, and plastic. Statistical analysis methods for quality control are also covered. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisite: CVEG 2014 with a grade of C or better.
CVEG3022 Public Works Economics (Sp, Fa) Continues the concepts of engineering design and the engineering approach to the design of projects. The principles and regulations of engineering economy are introduced. Creative thinking is emphasized. Recitation 2 hours per week. Prerequisite: Junior standing.

CVEG3131L Soil Mechanics Laboratory (Sp, Fa) Index, strength, and consolidation properties of soils; test methods and specifications for soil sampling and testing. Corequisite: CVEG 3133.

CVEG3133 Soil Mechanics (Sp, Fa) Introduction to geotechnical engineering. Properties of soils related to foundations retaining walls, earth structures, and highways. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisite: CVEG 2113; and CVEG 3213 or CVEG 3503 with a grade of C or better.

CVEG3243 Environmental Engineering (Sp, Fa) Introduction to theorems and fundamentals of physical, chemical, and biological processes with emphasis on water supply and wastewater collection, transportation, and treatment. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisite: MATH 2584 with a grade of C or better, and CHEM 1113 or CHEM 1103 with a grade of C or better.

CVEG3304 Structural Analysis (Sp, Fa) Moment distribution methods; approximate methods of analysis and design for reinforced concrete structural slabs. Design of one-way and two-way structural slabs by the direct design method and equivalent frame methods. Prerequisite: CVEG 4033 with a grade of C or better.

CVEG4053 Land Surveying (Irregular) Consideration of basic principles involved in measuring properties of soils. Detailed analysis of standard and specialist foundation design topics. Prerequisite: CVEG 4303 and 4313.

CVEG4083 Control Surveys (Irregular) Sun and Polars observations for astronomical azimuth, solar access studies; control traversing, leveling, triangulation; state plane coordinate systems and contaminant remediation applications. Analysis and measurement of flow of water and contaminants through saturated and unsaturated soils, clay mineralogy and soil-chemical properties and environmental regulations of the permitting process, permit requirements and related issues. Prerequisite: CVEG 3243 with a grade of C or better and senior standing.

CVEG4088 Geotechnical Engineering Design (Sp, Fa) Application of physical, biological, and chemical operations and processes to the design of water supply and wastewater treatment systems. Prerequisite: CVEG 3243 with a grade of C or better.

CVEG4303 Reinforced Concrete Design I (Sp, Fa) Framework for design of reinforced concrete elements with emphasis on ultimate strength design supplemented by working stress design for deflection and crack analysis. Prerequisite: CVEG 2113 and CVEG 3004 with grades of C or better.

CVEG4313 Structural Steel Design I (Sp, Fa) Design of structural steel elements by elastic load the and Resistance Factor Design method. Intensive treatment of tension, bending, shear, and connection issues. Prerequisite: CVEG 3413 and CVEG 4303 with a grade of C or better.

CVEG4323 Design of Structural Systems (Sp) An overview of the structural design of buildings. Investigates structural design methods and analysis of structures and detailing including consideration of fabrication, construction and erection issues. Prerequisite: CVEG 4303 and 4313.


CVEG4335 Timber Design (Irregular) Selection of timber beams, columns, and beam-columns. Physical properties of wood, analysis and design of timber connections. Truss design; general principles of wood design, treatment for decay, and fire protection. Prerequisites: CVEG 2113; and CVEG 3004 with grades of C or better.

CVEG43413 Measurement of Soil Properties (Irregular) Analytical and experimental investigations of soil volume excavations, and other seepage control systems. Conductivity of soils in the field, seepage through earth dams, controlled experiments, seepage, and capillary phenomena. Prerequisites: CVEG 3243 and 3250 with a grade of C or better.

CVEG43513 Construction Management (Sp, Fa) Analysis of methods and procedures for management of civil engineering construction projects. Planning, estimating, specification design, and scheduling of the construction sequence and critical path. Management, controlling, and accounting of project activities. Prerequisite: CVEG 3413 with a grade of C or better.

CVEG43593 Concrete Reinforcement Design (Irregular) Advanced study of the properties of surficial soils; soil classification systems; pedology; soil occurrence and variability; subgrade evaluation procedures; repeated load behavior of soils, including fatigue and creep; soil stress-strain relationships, strength, and failure potential. Prerequisite: CVEG 4313 with a grade of C or better.

CVEG43693 Soils and Foundations (Irregular) Comprehensive study of the engineering properties and behavior of materials commonly used in transportation facilities as they relate to the design and performance of flexible and rigid pavement systems. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisites: CVEG 3133, CVEG 3413, and INEG 2313 with grades of C or better.

CVEG43793 Foundations (Irregular) Applications of one-way and two-way structural slabs by the direct design method and equivalent frame methods. Prerequisite: CVEG 4303 with a grade of C or better.

CVEG4423 Geotechnical Engineering (Sp, Fa) Foundation analysis, design and performance of flexible and rigid pavement systems. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisites: CVEG 3133, CVEG 3413, and INEG 2313 with grades of C or better.

CVEG4523 Dynamic Loading of Soils (Irregular) Theoretical background to and practical code requirements for various structural loadings. These include dead loads, occupancy loads, roof loads and ponding, snow loads, granular loads, vehicular loads, wind loading, and seismic loads. Prerequisites: CVEG 3004 and CVEG 4303 (or CVEG 4313) with grades of C or better.

CVEG45293 Environmental Engineering Design Project (Sp) Comprehensive design project primarily related to environmental issues. Corequisite: CVEG 4523.

CVEG45281 Geotechnical Design Project (Sp) Comprehensive design project primarily related to geotechnical issues. Prerequisite: CVEG 4303 with a grade of C or better.

CVEG45282 Structural Design Project (Sp) Comprehensive design project primarily related to structural issues. Corequisite: CVEG 4303.

CVEG45284 Transportation Design Project (Sp) Comprehensive design project primarily related to transportation issues. Corequisites: CVEG 4523 and CHEM 1113 or CHEM 1103.

CVEG5183 Geo-Environmental Engineering (Irregular) The study of advanced topics in the structural engineering field. May include participation in geo-environmental engineering courses normally only available to graduate students. Prerequisite: CVEG 3133 with a grade of C or better. May be repeated for up to 6 hours of degree credit.

CVEG54994H Honors Studies in Environmental Engineering (Irregular) The study of advanced topics in engineering the environmental field. May include participation in environmental engineering courses normally only available to graduate students. Prerequisite: CVEG 3243 with a grade of C or better. May be repeated for up to 6 hours of degree credit.

CVEG4983H Honors Undergraduate Thesis (Irregular) The study of advanced topics in the structural engineering field. May include participation in structural engineering courses normally only available to graduate students. Prerequisite: CVEG 3304 with a grade of C or better. May be repeated for up to 6 hours of degree credit.
characteristics; evaluation of site response using wave propagation techniques; liquefaction of soils; seismic response of earth and foundation systems. Prerequisite: CVEG 4143 with a grade of C or better.

CVEG5213 Water Treatment & Distribution System Design (Sp) Design of industrial and municipal water treatment plants. Discussion of design and determination of water requirements for several uses. Distribution system analysis and design including distribution storage and pumping. Prerequisite: CVEG 3243 with a grade of C or better.

CVEG5214 Advanced Wastewater Process Design and Analysis (Fa) Application of advanced techniques for the analysis of wastewater treatment facilities. Physical, chemical and biological processes for removing suspended solids, organics, and nitrogen and phosphorus. Laboratory treatability studies will be used to develop design relationships. Lecture 3 hours, laboratory 3 hours per week. Corequisite: Lab component. Prerequisite: CVEG 3234 and CVEG 4243 with grades of C or better.

CVEG5233 Microbiology for Environmental Engineers (Irregular) Fundamental and applied aspects of microbiology and biochemistry relating to water quality control, wastewater treatment, and stream pollution. Prerequisite: CVEG 3243 with a grade of C or better.

CVEG5243 Groundwater Hydrology (Irregular) Detailed analysis of groundwater movement, well hydraulics, groundwater withdrawal and recharge, surface and subsurface investigations of groundwater and groundwater management, saline intrusion and groundwater modeling will be addressed. Prerequisite: CVEG 3223.

CVEG5253 Open Channel Flow (Irregular) Open Channel Flow includes advanced open channel hydraulics, flow measurement techniques, a hydrology review, culvert and storm drainage facility design, natural channel classification (fluvial geomorphology) and rehabilitation, computer methods and environmental issues. Prerequisite: CVEG 3213 and CVEG 3223.

CVEG5313 Matrix Analysis of Structures (Irregular) Energy and displacement methods of structural analysis as applied to conventional forms, space trusses, and frames. Prerequisite: CVEG 3304 with a grade of C or better.

CVEG5323 Structural Dynamics (Irregular) Dynamics response of beam of free vibration and natural frequencies. Structural response and correlation. Analysis response spectra, Computer programs for dynamic analysis. Design considerations for structures subjected to time-varying forces including earthquake, wind, and blast loads. Prerequisite: CVEG 3304 with a grade of C or better.

CVEG5333 Concrete Materials (Irregular) Topics include portland cement production, supplementary cementing materials, fresh and hardened concrete properties, mixture proportions, curing, and testing. Laboratory content. Corequisite: Lab component. Prerequisite: CVEG 4303 with a grade of C or better.

CVEG5343 Highway Bridges (Irregular) Economics of roadway system, traffic control and transportation, road hazard prevention, and horizontal and vertical alignment. Prerequisite: CVEG 3304 with a grade of C or better.

CVEG5353 Matrix Analysis of Structures (Irregular) Energy and displacement methods of structural analysis as applied to conventional forms, space trusses, and frames. Prerequisite: CVEG 3304 with a grade of C or better.

CVEG5363 Advanced Topics in Reinforced Concrete (Irregular) Analysis and design of reinforced concrete members. Topics include slender columns, one-way and two-way slabs, design, strut and tie design, and torsion. Prerequisite: CVEG 4303 with a grade of C or better.

CVEG5373 Advanced Structural Steel Design (Irregular) Design of structural steel components using the Load and Resistance Factor Design method. Intensive treatment of simple and eccentric connections, composite construction, plate girders, and plastic analysis and design. Prerequisite: CVEG 4313 with a grade of C or better.

CVEG5383 Finite Element Methods in Civil Engineering (Irregular) An understanding of the fundamentals of the finite element method and its application to structural configurations too complex to be analyzed with conventional design procedures. Application to other areas of civil engineering analysis and design such as soil mechanics, foundations, fluid flow, and flow through porous media. Prerequisite: Graduate standing.

CVEG5433 Finite Element Methods (Irregular) The course will continue from the basic material addressed in the undergraduate course and investigate in more detail stress analysis as it pertains to civil engineering type problems. Topics addressed in the course will include stress analysis (two-dimensional), constitutive relationships, solutions for two-dimensional load and boundary specification on elastic foundations, and energy methods. Prerequisite: CVEG 2014 or MEEG 3013 with a grade of C or better.

CVEG5443 Advanced Reinforced Concrete II (Irregular) Design of reinforced concrete members for fluid and granular loads. Prerequisite: CVEG 4303 with a grade of C or better.

CVEG5451 Transportation and Land Development (Irregular) Study of relation between transportation facilities and transportation network. Application of planning, design, and operational techniques to manage land development impacts upon the transportation system, and to integrate land layout with transportation network layout. Prerequisite: Graduate standing.

CVEG5452 Structural Design of Pavement Systems (Irregular) An introduction to the structural design of pavement systems including: survey of current design procedures; study of rigid pavement jointing and reinforcement practices; examination of the behavioral characteristics of pavement materials and of rigid and flexible pavement systems; introduction to structural analysis theories and to pavement management concepts. Prerequisite: CVEG 4433 with a grade of C or better.

CVEG5453 Traffic Engineering (Irregular) A study of both the underlying theory and the use of traffic control devices and traffic signs and symbols with emphasis on their application to improved traffic flow and safety, and driver and vehicle characteristics, geometric design, and societal concerns. Also includes methods to collect, analyze, and use traffic data. Prerequisite: CVEG 3413 with a grade of C or better or graduate standing.

CVEG5456 Transportation Modeling (Irregular) The use of mathematical techniques and/or computer software to model traffic flow and to analyze and predict traffic characteristics and capacity. Applications for planning, design, operations. Prerequisite: CVEG 3413 with a grade of C or better and graduate standing.

CVEG5457 Transportation System Characteristics (Irregular) Introduction to traffic flow theory, including traffic stream interactions and capacity. Applications for planning, design, operations. Prerequisite: CVEG 3413 with a grade of C or better and graduate standing.

CVEG5458 Transportation Management Systems (Irregular) Six transportation management systems are explored: pavement, bridge, intermodal, public transportation, safety, and congestion. System approach is presented. Techniques are introduced on how to optimally allocate resources. Pavement and bridge structure basics are discussed and their performance parameters are presented. Case studies are used to illustrate the design and specification of various modes of transportation. Safety and congestion problems in transportation are addressed.

CVEG562V Research (Sp, Su, Fa) (1-6) Fundamental and applied research. Prerequisite: Graduate standing. Corequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

CVEG563V Special Problems (Irregular) (1-6) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

CVEG566V Master’s Thesis (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing.

CVEG700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy.

DANC1932 Beginning Ballet (Sp, Fa) Introduction to the basic techniques of ballet in the recognized classic form including barre exercises, port de bras, balance, and center practice.

DANC1942 Beginning Ballet II (Sp) A continuation of the basic techniques of classical ballet from DANC 1932. Prerequisite: DANC 1932.

DEAC1961 Ballroom Dance (Sp) The fundamentals of ballroom dance.

DRAM1003 Basic Course in the Arts: Theatre Appreciation (Sp, Su, Fa) Introduction to theatre arts; playwriting, directing, and design for the general student. May not be presented toward satisfaction of the B.A. in fine arts requirement by drama majors.

DRAM1003H Honors Basic Course in the Arts: Theatre Appreciation (Sp, Fa)

DRAM1223 Introduction to Dramatic Art (Sp, Fa) Introduction to an examination of the various elements that make up dramatic art. Study of the history, literature, theory, and practice of the theatre, from ancient to modern times, from the playwright to the producer.

DRAM1311L Stage Technology I Laboratory (Sp, Fa) Practicum of application of costume technology and makeup skills. Students will participate in production projects involving construction and preparation of costumes and makeup designs associated with departmental productions. Production running crew positions will be assigned.

DRAM1313 Stage Technology I: Costumes and Makeup (Sp, Fa) Fundamentals of basic costume construction with an emphasis on techniques, materials, planning and process. Training in the basic principles of theatrical makeup application. Corequisite: DRAM 1311.

DRAM1321L Stage Technology II Laboratory: Scenery and Lighting (Sp, Fa) Practicum of application of principles of scenery and lighting technology. Students will participate in projects involving the construction and preparation of scenery, stage properties, and lighting associated with departmental productions. Production running crew positions will also be assigned.

DRAM1683 Acting I (Sp, Su, Fa) An analytical approach to the actor's art with emphasis on the techniques of character creation.

DRAM2231 Introduction to Theatrical Design (Fa) Fundamentals of design for the theatre including costume, lighting, and scenery. Study of the designer's role in the production process and an introduction to design practice in the basic principles of two-dimensional art and graphic forms through various media, and a study of color and color theory as they apply to the major areas of theatrical design. Prerequisite: DRAM 1223 and DRAM 1311.

DRAM2253 Acting II (Sp, Fa) Fundamentals of scenery and lighting technology with emphasis on theatre tools, equipment, and basic drafting. Training in basic principles and skills of stage carpentry, lighting technology and rigging. Corequisites: DRAM 1321L and DRAM 1683.

DRAM2313 Stage Technology I: Scenery and Lighting (Sp, Fa) Fundamentals of scenery and lighting technology with emphasis on theatre tools, equipment, and basic drafting. Training in basic principles and skills of stage carpentry, lighting technology and rigging. Corequisite: DRAM 1321L.

DRAM2683 Acting (Sp, Fa) (Formerly DRAM 4601) Advanced theories and techniques of acting. Prerequisite: DRAM 1223 or 1003 or DRAM 1003H and DRAM 1683.

DRAM3001 Production Practicum (Sp, Su, Fa) Credit for participation in technical assignments related to mainstage or faculty-directed productions: one (1) credit hour per production. Assignments shall be determined by the faculty. Credit will be awarded only after completion of assignments and only with faculty approval. May be repeated for up to 2 hours of degree credit.

DRAM3011 Performance Practicum (Sp, Su, Fa) Credit for participation in faculty-directed productions: one (1) credit hour per production. Assignments shall be determined by the faculty. Credit will be awarded only after satisfactory completion of assignment and with faculty approval. May be repeated for up to 2 hours of degree credit.

DRAM3201 Advanced Production Practicum (Irregular) Credit for participation in advanced technical assignments related to mainstage or faculty-directed productions: one (1) credit hour per production. Assignments shall be determined by the faculty. Credit will be awarded only after completion of assignments and only with faculty approval. Prerequisite: Two credit hours of DRAM 3001. May be repeated for up to 2 hours of degree credit.

DRAM3204 Advanced Production Practicum (Irregular) Credit for advanced performance in faculty-directed productions: one credit hour per production. Assignments shall be
determined by the faculty. Credit will be awarded only after satisfactory completion of assignment and with faculty approval. Prerequisite: DRAM 1223 or DRAM 1003 or DRAM 1003H.

DRAM 4233 History of the Theatre I (Fa) A historical and cultural survey of theatrical events spanning the 19th and 20th centuries. Emphasis is given to Western theatre practices. Prerequisite: Graduate standing in Drama. May be repeated for up to 6 hours of degree credit.

DRAM 4453 History of the Theatre III (Sp) An examination of the history and theory of modern theatrical styles. Prerequisite: DRAM 4463 African American Theatre History 1950 to 1975 and DRAM 4465 Advanced study of historical and cultural context of African American theatre. Prerequisite: DRAM 1223 or DRAM 1003 or DRAM 1003H.

DRAM 4463 African American Theatre History 1950 to 1975 and DRAM 4465 Advanced study of historical and cultural context of African American theatre. Prerequisite: DRAM 1223 or DRAM 1003 or DRAM 1003H.

DRAM 448V Internship (Irregular) (1-12) Prerequisite: Graduate standing in Drama. May be repeated for up to 9 hours of degree credit.

DRAM 4773 Acting Shakespeare (Irregular) A chronological examination of African-American American theatre history from 1950 to the present through the study of African-American American theatre texts. Prerequisite: DRAM 1223 or DRAM 1003 or DRAM 1003H. May be repeated for up to 6 hours of degree credit.

DRAM 492V Internship (Irregular) (1-12) Application of theory through design problems and evaluation. Course will be offered on an individual basis. Prerequisite: Graduate standing in Drama.

DRAM 5183 Scene Design Studio (Fa) Advanced study of scenic design and execution. Each student focuses on one script for the full term. Prerequisites: DRAM 3653 or instructor consent. May be repeated for up to 6 hours of degree credit.

DRAM 5243 Costume Technology I (Irregular) Advanced study of techniques and skills in the construction of costumes. Prerequisite: DRAM 3213 or DRAM 5213 or instructor consent. May be repeated for up to 6 hours of degree credit.

DRAM 548V Meisner Technique I (Irregular) (1-3) Prerequisite: DRAM 548V. Phrasing, attention to the speaking of blank verse. Prerequisite: Graduate standing in Drama. May be repeated for up to 4 hours of degree credit.

DRAM 548V Meisner Technique II (Irregular) (1-3) Prerequisite: DRAM 548V. Contributes to on-going portfolio development. Prerequisite: Graduate standing or instructor consent. May be repeated for up to 9 hours of degree credit.

DRAM 59393 Stage Lighting Design Studio (Fa) Individual projects in lighting design with emphasis on light sources, light control, equipment design and specification and the mechanics of lighting. Prerequisites: DRAM 450V and instructor consent. May be repeated for up to 9 hours of degree credit.

DRAM 59393 Stage Lighting Design Studio (Sp) Individual projects in lighting design with emphasis on light sources, light control, equipment design and specification and the mechanics of lighting. Prerequisites: DRAM 450V and instructor consent. May be repeated for up to 9 hours of degree credit.

DRAM 6474V Meisner Technique I (Irregular) (1-3) Prerequisite: DRAM 548V. An introduction to the various research methodologies. Sample topics include characterization, Chekhov, Pinter, Brecht, improvisation and mask work. Topics vary each semester. Prerequisites: Graduate standing in Drama. May be repeated for up to 18 hours of degree credit.

DRAM 6474V Meisner Technique II (Irregular) (1-3) Prerequisite: DRAM 548V. Advanced study of character and emotional preparation. Prerequisites: Graduate standing or instructor consent. May be repeated for up to 6 hours of degree credit.

DRAM 6474V Meisner Technique III (Irregular) (1-3) Prerequisite: DRAM 548V. Advanced study of character and emotional preparation. Prerequisites: Graduate standing or instructor consent. May be repeated for up to 6 hours of degree credit.

DRAM 650V Playwriting (Fa) (1-3) A workshop course for students who wish to attempt original work in the dramatic form. Prerequisite: Junior standing. May be repeated for up to 12 hours of degree credit.

DRAM 699V Honors Course (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing in Drama. May be repeated for up to 6 hours of degree credit.

DRAM 7193 Research Methods in Dramatic Literature (Irregular) Independent research projects in the various research methodologies. Prerequisite: Graduate standing in Drama. May be repeated for up to 12 hours of degree credit.

DRAM 7213 Costumes Design (Irregular) Advanced study of the art and practice of stage costume design. Emphasis on the expression of character through costume. Development of rendering and research skills. Prerequisite: Graduate standing in Drama.

DRAM 7243 Costume Technology I (Irregular) Advanced study of the art of scenic design, including historical and contemporary styles and procedures. Practical experience gained through work on departmental productions. Prerequisite: DRAM 1223, DRAM 1212L and DRAM 2313.

DRAM 7333 Dramatic Criticism (Irregular) Analysis of critical theories from Aristote to the present; interrelationships of theatre disciplines as well as the influence of the church, state, and press on dramatic criticism. Prerequisite: DRAM 3803.

DRAM 74733 Acting Shakespeare (Irregular) Work on the special techniques required for performance of the plays of special techniques required for performance of the plays of Shakespeare and his contemporaries. The cultural and theatrical context required for understanding the scripts. Special attention to the speaking of blank verse.

DRAM 84833 Scene Painting I (Irregular) A studio class in painting techniques for the theatre. Exercises in color, textures, styles, and execution. Prerequisite: DRAM 1223/1231L or enrolled in Drama MFA program. May be repeated for up to 6 hours of degree credit.

DRAM 940V Independent Study (Sp, Su, Fa) (1-3) Individually designed and conducted programs of reading and reporting under the guidance of a faculty member. May be repeated for up to 3 hours of degree credit.

DRAM 941V Symposium (Sp, Su, Fa) (1-3) Courses not listed in the regular curriculum, offered on demand on the basis of student needs and changes within the profession. May be repeated for credit.
The area of concentration will be determined by the student’s specific writing project(s). Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

DRAM543 Creating a One-Person Show (Irregular) Actors learn to use compelling personal experiences and interests in the creation of a unique one-person show. Includes exploration in character development, and production of a one-person show. Prerequisite: Graduate standing in Drama.

DRAM552 Graduate Voice and Speech II (Sp) A continuation of DRAM 551, focusing more closely on the connection between breath support and volume, pitch, range, resonance and articulation. Prerequisite: DRAM 5432.

DRAM566 Graduate Voice and Speech III (Irregular) Continuation of DRAM 551 and DRAM 552, focusing on the phonic habits of vocal expression: study of vowels and consonants according to the International Phonetic Alphabet (IPA). Prerequisite: DRAM 5552.

DRAM572 Graduate Voice and Speech IV (Irregular) Continuation of Graduate Voice and Speech III. Extension of the application of the IPA to the analysis of different accents of individuals for whom English is a second language. Approximately eight dialects of English will be examined. Prerequisite: DRAM 5560.

DRAM593 Acting and Directing Absurdist Theatre (Irregular) This course focuses on a particular dramatic style that developed following World War II: Absurdist. In scene presentation, actors will grapple with the unique challenges and acting and directing these plays, as well as explore the cultural contexts, philosophies and theatrical traditions that led to their invention. Prerequisite: Graduate standing in Drama.

DRAM660V Graduate Voice and Speech V (Irregular) Theories and practice of directing realistic drama: script analysis; spatial considerations of composition and picturization; development in production of the Aristotelian concepts of plot, characterization, staging, music (sound), and spectacle. Prerequisite: Graduate standing.

DRAM652 Seminar in Dramatic Art (Irregular) (1-9) Research, discussion and projects focusing on a variety of topics including theatre management, advanced acting methods, and specialized periods in dramatic literature. Prerequisite: Senior or graduate standing. May be repeated for up to 9 hours of degree credit.

DRAM663 Directing Modern Drama (Irregular) Studio course exploring the challenges of directing post-19th Century dramatic literature. Individual projects in collaboration with actors. Sample dramatic literature includes styles such as Realism, Expressionism, Absurdism, post-Modernism and Epic Theatre. Topics vary each semester. Prerequisite: Graduate standing or graduate standing in Drama.

DRAM583 Directing Studio (Sp, Fa) Hands-on exploration into the direction of historical and contemporary texts and styles, including Greek, Roman, Shakespeare, Realism, Absurdist and popular. Advice of specific writing project(s). Prerequisite: Graduate standing in Drama.

DRAM592V Internship (Irregular) (1-6) Supervised practice required. Prerequisite: Graduate standing in Drama or Instructor consent.

ECON2023 Principles of Microeconomics (Sp, Su, Fa) The role of the World Bank and IMF as multilateral lenders and examination of their success and failures; their effects; and fiscal policy. Prerequisite: ECON 1013 or ECON 1014.

ECON3333 Public Economics (Irregular) Governmental functions, revenues; tax shifting, incidence; public expenditures, their effects; and fiscal policy. Prerequisite: ECON 1013 or ECON 1014.

ECON3433 Money and Banking (Sp, Fa) Financial history; theory and practice of financial institutions; monetary policy in theory and practice. Prerequisite: ECON 1013 and ECON 1014.

ECON3533 Labor Economics (Fa) Economic analysis of labor markets. Topics include analysis of labor demand and supply; human capital investment; wage differentials; discrimination; economic effects of labor unions and collective bargaining; public sector labor markets; unemployment; and labor market effects on inflation. Prerequisite: ECON 1013 and ECON 2013 or ECON 2143.

ECON3843 Economic Development, Poverty, & the Role of IMF and World Bank in Low-Income Countries (Fa) Examine theories and patterns of economic development in emerging economies. The role of the World Bank and IMF as multilateral lenders and examination of their success and failures; their effects; and fiscal policy. Prerequisite: ECON 1013 or ECON 2013 or ECON 2143.

ECON3853 Emerging Markets (Fa) An analysis of the business and economic environment of emerging markets, focusing in Latin America, South East Asia and Transition Economies. The topics and issues covered include market structure and market failures, financial and legal background, current institutions and political economy issues, and current business opportunities. Prerequisite: ECON 2143; or ECON 2013 and ECON 2023.

ECON3933 The Japanese Economic System (Sp) This class presents essential facts about the Japanese economy and then subjects them to modern economic analyses. Japanese institutions and policies are contrasted with their American counterparts, and these economies are compared in terms of performance. Current issues including contemporary economic conditions and US - Japanese trade relations are also examined. Prerequisite: ECON 2013 or ECON 2023.}

ECON4003H Honors Economics Colloquium (Sp, Fa) Explores current economic issues and policy developments in the field of Economics. Prerequisite: Senior standing.

ECON4033 History of Economic Thought (Sp, Fa) Critical analysis of economic theories relative to their historical and intellectual background. Prerequisite: (ECON 2013 and ECON 2023) or ECON 2143 or ECON 3053.

ECON410V Special Topics in Economics (Irregular) (1-6) Covers special topics in economics not available in other courses.

ECON2013 Principles of Macroeconomics (Sp, Fa, Su) Macroeconomics, including aggregate employment, income, fiscal and monetary policy, growth and business cycles. Credit will be awarded for only one of ECON 2103 and ECON 1203. Prerequisite: MATH 1203 or higher, or a score of 26 on the math component of the ACT exam, or 600 on the math component of the SAT.

ECON2013H Honors Principles of Macroeconomics (Fa) Macroeconomics, including aggregate employment, income, fiscal and monetary policy, growth and business cycles. Credit will be awarded for only one of ECON 2103H and ECON 1203. Prerequisite: MATH 1203 or higher, or a score of 26 on the math component of the ACT exam, or 600 on the math component of the SAT.

ECON2023 Principles of Microeconomics (Sp, Su) Microeconomic analysis, including market structures, supply and demand, production costs, price and output, and international economics. Credit will be awarded for only one of ECON 2023 and AGEC 1103. Prerequisite: MATH 1203 or higher, or a score of at least 26 on the math component of the ACT exam, or a score of at least 600 on the math component of the SAT. (Same as AGEC 2103)

ECON2023H Honors Principles of Microeconomics (Sp) Microeconomic analysis, including market structures, supply and demand, production costs, price and output, and international economics. Credit will be awarded for only one of ECON 2023 and AGEC 1103. Prerequisite: MATH 1203 or higher, or a score of at least 26 on the math component of the ACT exam, or a score of at least 600 on the math component of the SAT.
ECON3343 Economics of Organizations (Fa) An economic perspective on the design of organizations. Analyzes developments in game theory and contract theory to analyze the role of information and incentives within and between firms. Covers the boundaries of firms, integration and outsourcing, authority and incentives, and alternative organizational structures in an evolutionary perspective. Prerequisite: (ECON 2013 and ECON 2023) or ECON 2143. May be repeated for up to 6 hours of degree credit.

ECON4333 Economics of Organizations (Fa) An economic perspective on the design of organizations. Analyzes developments in game theory and contract theory to analyze the role of information and incentives within and between firms. Covers the boundaries of firms, integration and outsourcing, authority and incentives, and alternative organizational structures in an evolutionary perspective. Prerequisite: (ECON 2013 and ECON 2023) or ECON 2143. May be repeated for up to 6 hours of degree credit.

ECON4433 Experimental Economics (Irreg) Covers special topics in economics not available in other courses. Prerequisite: (ECON 2013 and ECON 2023) or ECON 2143. May be repeated for up to 6 hours of degree credit.

ECON6823 International Development Economics (Sp) The course discusses international development economics from a microeconomic perspective. Topics include the analysis of the pattern and content of trade; trade in factors of production; and the applications of trade theory to the study of trade barriers such as tariffs and quotas. Prerequisite: (ECON 2013 and ECON 2023) or ECON 2143.

EDFD5233 School Organization and Administration (Odd years, Fa) (1-3) Required for all state certified educators. A seminar focusing on the development, conducting, and analyzing controlled laboratory experiments. Standard behavioral results are examined and the implications of such behavior for business and economic theory and policy. The class is scheduled to meet M 5-6 PM on the following dates: Fall 2023, Fall 2024, Fall 2025, Spring 2026, Spring 2027, and Spring 2028. Prerequisites: Graduate standing and an introductory course in education. May be repeated for up to 6 hours of degree credit.
Course Descriptions

EDLE5083 Analytical Decision-Making (Sp, Even years, Su) An introduction to decision making as a performance based ex-
amination of the principles and practices related to the build-
ning administrator’s role in the development, administration, and
evaluation of curricular programs in public schools. This
includes fostering a school culture, fostering communication, aligning curriculum with state mandated standards, and staff
development.

EDLE5093 Effective Leadership for School Improvement (Sp, Ra) A performance based examination of strategic plan-
ning, group facilitation and decision-making, organizational
behavior and development, professional ethics and standards, student services administration, and principles of effective
leadership.

EDLE574V Internship (Sp, Su, Fa) (1-6) Supervised in-
school/district experiences individually designed to afford op-
opportunities to apply previously-acquired knowledge and skills in administrative workplace settings. May be repeated for up to 3 hours of degree credit.

EDLE600V Master’s Thesis (Sp, Su, Fa) (1-6) EDEL6023 School Facilities Planning and Management (Odd years, Fa) School facilities planning, management, cost
analysis, operations, and maintenance of the school plant.

EDLE6033 Community-Related Services (Even years, Sp) Community analysis, politics and education; power groups and influ-
ence. Prerequisites: EDEL2523 or EDEL2823. Local policy
development and implementation; effective communication and
public relations strategies.

EDLE605V Independent Study (Sp, Su, Fa) (1-6) May be
repeated for up to 6 hours of degree credit.

EDLE6093 School District Governance: The Superinten-
dency (Even years, Fa) Analysis of the organizational and
governance structures of American public education at na-
tional, state, and local levels.

EDLE1013 Financial Management (Odd years, Su) Fiscal and resource management in public schools: budgeting, insurance, purchasing, and accounting.

EDLE3333 Advanced Fiscal and Legal Issues in Education (Odd years, Sp) Financial management and education policies; legal and financial issues affecting public school education. Pre-
requisite: Advanced graduate standing.

EDLE6503 Topics in Educational Research for School Administration (Odd years, Fa) Application of educational research in the school setting by educational administrators.

EDLE6773 Business Management (Odd years, Su) Fiscal and resource management in public schools: budgeting, insurance, purchasing, and accounting.

EDLE6833 Advanced Qualitative Methods in Educational Research (Sp) This course has been designed to prepare graduate students with a more in-depth understanding of qual-
itative research methods. Emphasis will be placed on prepar-
ing educational leadership students to design a qualitative research project. Prerequisite: EDLE 6503 and ESRM 6403 or equivalent.

EDLE6553 Advanced Application of Educational Leader-
ship (Odd years, Su) A review of seminal and current works on leadership as applied to the educational setting. Provides knowledge of classic and contemporary strategies for leader-
ship.

EDLE6553 Educational Policy (Odd years, Sp) Examination of the research and theory related to the evolution of local, state, and federal governance and educational policy. Empha-
sis given to the consideration of procedures involving policy formulation, implementation, and analysis.

EDLE6553 Advanced Qualitative Methods in Educational Research (Sp) This course has been designed to provide graduate students with a more in-depth understanding of qual-
itative research methods. Emphasis will be placed on prepar-
ing educational leadership students to design a qualitative or mixed-method dissertation project. Prerequisite: ESRM 6543 or WDED 572V.

EDLE5563 Advanced Data Collection for Program Evalu-
ation (Odd years, Fa) This course is designed to provide graduate students with an in-depth understanding on how to effec-
tively collect data for a program evaluation. Emphasis will be placed on guiding educational leadership students through the data collection procedures they will use for their disserta-
tion. Prerequisite: EDLE 6503.

EDLE5573 Advanced Empirical Analysis for Program Eval-
uation (Sp) This course is designed to provide gradu-
ate students with an in-depth understanding of how to effec-
tively analyze data for a program evaluation. Emphasis will be placed on guiding educational leadership students through the data analysis process they will use for their dissertation. Prerequisite: EDLE 6503.

EDLE674V Internship (Sp, Su, Fa) (1-6) May be repeated for up to 6 hours of degree credit.

EDLE680V Educational Specialist Project (Sp, Su, Fa) (1-
6) An original project, research project, or report required of all Ed.S. Degree candidates. Prerequisite: to the Ed.S. program.

EDLE689V Seminar (Sp, Su, Fa) (1-6) Prerequisite: Ad-
vanced graduate standing. May be repeated for up to 6 hours of degree credit.

EDLE700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prere-
quisite: Candidacy.

Education Reform (EDRE)

EDRE4913H Honors Social Studies through Fiction (Fa) As common references to utopian schemes and Orwellian
newspaper show, some of the most important works of politics
works of political fiction, to better understand recent political
history and such concepts as power, freedom, totalitarianism,
discrimination, and social class.

EDRE498VH Honors Seminar (Irregular) (1-3) Topics vary by
instructor.

EDRE499V Special Topics in Education Policy (Irregular) (1-3) Topics vary by instructor. May be repeated for up to 6 hours of degree credit.

EDRE559V Field Research (Irregular) (1-6) Directed gradu-
ate-level field research in education policy settings. Prerequi-
tive: Approval of EDRE Graduate Director. May be repeated for up to 6 hours of degree credit.

EDRE6023 Economics of Education (Odd years, Sp) This
course applies the principles of economic analysis to educa-
tion and reform. Topics include: Human capital and signaling
theories; education labor markets; education reform; public ed-
fund policies; public policy and market forces. The course also features empirical evidence evaluating economic theories of education.

EDRE6033 Politics of Education (Sp) This course explores
historical and institutional forces that shape education policymaking. Particular attention will be paid to the experi-
ence of past education reform movements as well as the influ-
ence of interest groups, federalism, bureaucracy, governance
structures, public opinion, and judicial review on education policy.

EDRE6043 Finance and Education Policy (Even years, Sp) This course examines K-12 education finance from the stand-
point of education policy. Topics include: Economic and finance, political science. Topics include: revenue sources and fiscal federalism, standards-based
finance and school finance, school funding formulas, ad-
equacy, teacher unionization, education labor markets, and
markets. The course also features empirical evidence on the educational impact of finance.

EDRE6053 Measurement of Educational Outcomes (Fa) This course will examine the various types of outcome and assessment measures used for education at the K-12 level throughout the United States; further, the students will engage in analyses of research that relies on these various educational outcomes.

EDRE6213 Program Evaluation and Research Design (Fa) This course provides students with training in the meth-
ods used to generate evidence-based answers to questions regarding the efficacy and impacts of education programs. The central questions that motivate most educational program evaluations are: (1) What is the problem? (2) What policies or programs are in place to address the problem? (3) What is their effect? (4) What works better? (5) What are the rela-
tive benefits and costs of alternatives? (Same as ESRM 6613)

EDRE6223 Research Seminar in Education Policy (Sp) This course provides students with the opportunity to learn about education policy research by interacting directly with the lead-
ing scholars and practitioners in the field. Students will also gain a foundation in the field of education policy research by reading and discussing some of the founding works of the field.

EDRE5413 Issues in Education Policy (Fa) This course examines how K-12 education policy is designed and imple-
mented in the United States. Students will develop a workingknowledge of policymaking frameworks to examine major edu-
cation policies of current interest and debate key policy issues that arise at each level of government. In great measure, the
content of the course will be accomplished through the consid-
eration of opposing stances on key educational policy debates and issues that are of current interest.

EDRE6423 Seminar in School Choice Policy (Even years, Fa) This course examines policy choice - perhaps the
most controversial education reform of our age. Students will
be introduced to the full set of school choice policies, in-
cluding charter schools and vouchers, and evaluate their ben-
efits and drawbacks as educational interventions. Including
charter schools and vouchers, and evaluate their ben-

EDRE6433 Seminar in Education Accountability Policy (Odd years, Sp) (Sp) This course examines K-12 school and dis-
tinct accountability under state and Federal law (e.g. NCLB), as
well as teacher and student accountability (e.g. exit exams).

EDRE6443 Seminar in Education Leadership Policy (Odd years, Fa) This course will examine the individual and system-

EDUC1001 Freshman Seminar (Fa) The course is designed to support and assist freshmen in becoming successful, self-
directed learners. Focus will be placed on processes that
help learners accomplish this goal and upon strategies for suc-
cessful learning. The course will meet twice a week for the first eight weeks. Students will receive one hour of ungraded credit if graded F.

EDUC1012 College Learning (Sp, Fa) EDUC 1012 supports students as they make the transition into a university environ-
ment. The focus is on developing and applying college-level thinking and learning skills to specific University courses and on developing a student support base through a class learn-
ing community. The course is required for students admitted provisionally to the University.

EDUC1021 College Learning II (Sp, Fa) EDUC 1021 complements EDUC 1012 by focusing on additional topics leading to student success, such as setting goals and imple-
menting action plans, assessing interests and skills, investigat-
ing career possibilities, and developing financial literacy.

EDUC1031 Math Study Skills (Sp, Su) Eight-week course designed for students experiencing difficulty in study-
ing and learning the cognitive and behavioral dimensions of
mathematics and its applications. The focus is on memory and mathematics, translating mathematics, and math anxiety. Also recommended for math education majors.

EDUC1051H Honors Social Studies through Fiction (Sp) As common references to utopian schemes and Orwellian
newspaper show, some of the most important works of politics
works of political fiction, to better understand recent political
history and such concepts as power, freedom, totalitarianism,
discrimination, and social class.

EDUC1063 Honors Seminar (Irregular) (1-3) Topics vary by
instructor. May be repeated for up to 6 hours of degree credit.

EDUC700V Doctoral Dissertation (Irregular) (1-18) Doctoral Dissertation. Prerequisite: Candidacy. May be repeated for up to 18 hours of degree credit.

Education (EDUC)

ELEG2104 Electric Circuits I (Fa) Introduction to circuit var-
ables, elements, and simple resistive circuits. Analysis tech-
niques applied to resistive circuits. The concept of inductance, capacitance and mutual inductance. The natural and step re-
ponses of RL, RC, and RLC circuits.

ELEG2114 Electric Circuits II (Sp) Introduction to complex numbers. Sinusoidal steady-state analysis of electric circuits,
active, reactive, apparent and complex power; balanced and unbalanced three-phase circuits; mutual inductance; the use of the Laplace transform for electric circuit analysis and two-port networks. Corequisite: Lab component. Pre- or Coreq: ELEG 2010.

ELEG2047V Special Topics in Electrical Engineering (Irreg) This course provides the students with an introduction to nanomaterials and devices. The students will be expected to explore and demonstrate an understanding of the material with a greater level of depth and breadth. Corequisite: Lab component. Pre- or Corequisite: ELEG 3093. This course may be repeated for up to 6 hours of degree credit.

ELEG2432 Switch Mode Power Conversion (Irregular) Basic switching converter topologies: buck, boost, buck-boost, Cuk, flyback, resonant; pulse-width modulation; integrated circuit controllers; switching converter design case studies; SPICE analyses of switching converters; state-space averaging and linearization; and switching converter transfer functions. Prerequisite: ELEG 3223 and ELEG 3123.

ELEG4061 Electrical Engineering Design I (Sp, Fa) Capstone design and application in electrical engineering. Prerequisite: ELEG 3224 and ELEG 3924.

ELEG4073H Honors Electrical Engineering Design II (Sp, Fa) Design and application in electrical engineering. Prerequisite: ELEG 4061.

ELEG4203 Semiconductor Devices (Irregular) Crystal properties and growth of semiconductors, energy bands and charge carriers in semiconductors, excess carriers in semiconductors, analysis and design of p/n junction transistors, and analysis and design of field-effect transistors. Students may not receive credit for both ELEG 4203 and ELEG 5203. Prerequisite: MATH 2584 and ELEG 3123; or graduate standing.

ELEG4203H Honors Organic Electronic Devices (Irregular) This course provides the students with an introduction to semiconductor devices and circuits. Students may not receive credit for both ELEG 4202 and ELEG 5393. Prerequisite: ELEG 4202 (Same as ELEG 6225).

ELEG4233 Introduction to Integrated Circuit Design (Fa) Design and layout of large scale digital integrated circuits using CMOS technology. Topics include digital MOS devices and basic circuits, integrated circuit layout and fabrication, dynamic logic, circuit design, and layout strategies for large scale CMOS circuits. Students may not receive credit for both ELEG 4233 and ELEG 5923. Prerequisite: ELEG 3214 or (ELEG 3933 and MATH 2584). (Same as CSCE 4333/ELEG 5923)

ELEG4233H Honors Introduction to Integrated Circuit Design (Irregular) Design and layout of large scale digital integrated circuits using CMOS technology. Topics include digital MOS devices and basic circuits, integrated circuit layout and fabrication, dynamic logic, circuit design, and layout strategies for large scale CMOS circuits. Students may not receive credit for both ELEG 4233 and ELEG 5923. Prerequisite: ELEG 3214 or (ELEG 3933 and MATH 2584). (Same as CSCE 4333/ELEG 5923)

ELEG4283 Mixed Signal Test Engineering I (Irregular) Overview of mixed signal testing, the test specification process, DC and parametric measurements, tester architecture and accuracy, tester hardware, sampling theory, DSP-based testing, analog channel testing, digital channel testing. Prerequisite: Senior or graduate standing.

ELEG4343 Organic Electronics Technology (Irregular) This course presents basic aspects of nanomaterials and device design and application in electrical engineering. Prerequisite: ELEG 3223 and ELEG 3924.

ELEG4403H Honors Control Systems (Irregular) Mathematical modeling of dynamic systems, stability analysis, control systems parameters, ladder-logic applications, process control systems, and frequency-domain design of feedback control systems: lead, lag, PID controllers. Special topics in microprocessor implementation. Credit not given for both ELEG 4403 and ELEG 5434. Prerequisite: ELEG 4213.

ELEG4403H Honors Control Systems (Irregular) Mathematical modeling of dynamic systems, stability analysis, control system architectures and sensor technologies. Time-domain and frequency-domain design of feedback control systems: lead, lag, PID controllers. Special topics in microprocessor implementation. Prerequisite: ELEG 3123.

ELEG4413 Advanced Control Systems (Irregular) A second course in linear control systems. Examination of multiple-input and multiple-output systems: State-space analysis, similarity transformations, eigenvector and eigenvector decomposition, stability in the sense of Lyapunov, controllability and observability, pole placement, quadratic optimization. Credit not given for both ELEG 4413 and ELEG 5413. Prerequisite: ELEG 4403 or equivalent course.

ELEG4463L Control Systems Laboratory (Irregular) Experimental study of various control systems and components. The use of programmable logic controllers in the measurement of systems parameters, ladder-logics applications, process-control applications, and electromechanical systems. Prerequisite: ELEG 3904 and ELEG 3121.

ELEG4503 Design of Advanced Electric Power Distribution Systems (Irregular) Design considerations of electric power distribution systems, including distribution transformer design and distribution system protection. Credit not given for both ELEG 4503 and ELEG 5453. Prerequisite: ELEG 4443 or ELEG 5413. This course may be repeated for up to 6 hours of degree credit.

ELEG4503H Honors Design of Advanced Electric Power Distribution Systems (Irregular) Design considerations of electric power distribution systems, including distribution transformer design and distribution system protection. Credit not given for both ELEG 4503 and ELEG 5453. Prerequisite: ELEG 4443 or ELEG 5413. This course may be repeated for up to 6 hours of degree credit.
Course Descriptions

In-be repeated for up to 3 hours of degree credit.

Senior standing. May be repeated for up to 6 hours of degree credit.

ELEG487VH Honors Advanced Digital Design (Irregular) To master advanced digital design concepts, including the design and testing of synchronous and asynchronous combinational and sequential circuits using state of the art CAD tools. Students may not receive credit for both ELEG 4891H and ELEG 5891H. Corequisite: Lab component. Prerequisite: ELEG 4002 or CSCE 2114. (Same as CSCE 4914)

ELEG4914H Honors Advanced Digital Design (Irregular) May be repeated for up to 6 hours of degree credit.

Programmable logic devices (FPGAs/CPLDs) have become essential building blocks for digital systems. They offer a general architecture that users can customize by inducing permanent or reversible physical changes. This course will deal with the implementation of logic options using these devices. Corequisite: Lab component. Prerequisite: ELEG 2913. (Same as CSCE 4350)

ELEG4903H Honors Introduction to RF and Microwave Design (Irregular) An introduction to microwave design principles. Transmission lines, passive devices, networks, impedance matching, filters, dividers, and hybrids will be discussed in detail. Active microwave devices will also be introduced. In addition, the applications of this technology as it relates to radar and communications systems will be reviewed. Prerequisite: ELEG 3703.

ELEG4933H Honors Introduction to Antennas (irregular) Basic antenna types: small dipoles, half wave dipoles, image theory, monopoles, small loop antennas. Antenna arrays: array factor, uniformly excited equally spaced arrays, pattern multiplication principles, nonuniformly excited arrays, phased arrays. Use of MATLAB programming and mathematical techniques for antenna analysis and design. Emphasis will be on using simulation to visualize variety of antenna radiation patterns. Corequisite: Lab component. Prerequisite: ELEG 2913. (Same as CSCE 4350)

ELEG4936H Honors Computational Field Theory (Irregular) Programmed logic devices (FPGAs/CPLDs) have become essential building blocks for digital systems. They offer a general architecture that users can customize by inducing permanent or reversible physical changes. This course will deal with the implementation of logic options using these devices. Corequisite: Lab component. Prerequisite: ELEG 2913.

ELEG4943 Computer Architecture (Irregular) Design of a single board computer including basic computer organization, instruction set, computer organization, instruction set, computer arithmetic, high-level languages, assembly language programming. Development tools. Implementation and testing of a complete microprocessor. Prerequisite: ELEG 3143 or ELEG 4403.

ELEG5203 Semiconductor Devices (Irregular) Crystall properties and growth of semiconductors, energy bands and band structures, impurity levels, donors and acceptors, majority and minority carriers, electron and hole mobilities, Fermi-Dirac distribution function, drift and diffusion currents, Hall effect, Shockley equation, equilibrium carrier concentrations. Prerequisite: ELEG 4203.

ELEG5223 Design and Fabrication of Solar Cells (Irregular) Solar cell physics, upset response to ionizing radiation, device physics, materials, device characterization and testing. Corequisite: Lab component. Prerequisite: ELEG 4203.

ELEG5233L Integrated Circuit Design Laboratory II (Irregular) Students design, check, and simulate digital integrated circuits which will be fabricated and tested in I.C. Design Laboratory II. Topics include computer-aided design, more in-depth coverage of CAD tools, lab design of very large scale chips. Prerequisite: ELEG 4233.

ELEG5263L Integrated Circuit Design Laboratory II (Irregular) Students test the I.C. chips they designed in I.C. Design Laboratory II using the z-transform and state-variable techniques. Analysis and design of digital control systems. Digital redesign for continuous-time control. Prerequisite: ELEG 4403.

ELEG5273 Electronic Packaging (Irregular) An introductory treatment of electronic packaging, from single chip to multilayer packages, including materials, substrates, electrical design, thermal design, mechanical design, package modeling and simulation, and processing considerations. Credit cannot be earned for both ELEG 5273 and ELEG 5233L. Corequisites: ELEG 3213 or ELEG 3913 and MATH 2584. (Same as MEEG 5273)

ELEG5283 Mixed Signal Test Engineering II (Irregular) Focus on digital and ana...
physiological systems: Modeling and dynamics of biological processes, biomedical sensors, time and frequency domain analysis, and control of biological systems, and an introduction to medical device regulations. Prerequisite: ELEG 4403 or equivalent.

ELEG473 Power System Dynamics (Irregular) Modeling, dynamics and control of the interconnected power systems; Design and implementation of control systems that respond to load fluctuations and fault conditions; Distribution of energy sources such as wind and solar power. Overview of the related industry and government regulations for power system protection and reliability. Prerequisite: ELEG 3124 and ELEG 3304 or equivalent.

ELEG503 Design of Advanced Power Distribution Systems (Irregular) An overview of advanced power distribution systems. 3 credit hours.

Design considerations of electric power distribution systems, including distribution transformer usage, distribution system implementation, primary and secondary networks design, applications of advanced equipment based on power electronics, and use of capacitors and voltage regulation. Students cannot receive credit for both 4530 and 5503. Prerequisite: ELEG 3304.

ELEG5513 Power Systems Analysis (Irregular) Modeling and analysis of electric power systems: Energy sources and conversion; load flow analysis; reference frame transformations; fault calculations; geometrical fault conditions; load forecasting and economic dispatch. Credit not given for both ELEG 4513 and ELEG 5513. Prerequisite: Graduate standing.

ELEG5523 Electric Power Quality (Irregular) The theory and analysis of quality for commercial, industrial, and residential power systems. Specific topics include harmonics, voltage sags, wiring and grounding, instrumentation, distributed generation and power electronic systems, and site surveys. Emphasis on the theoretical concepts. Prerequisite: ELEG 3303 or graduate standing.

ELEG5533 Power Electronics and Motor Drives (Irregular) V1 characteristics of insulated Gate Bipolar Transistors (IGBTs) and MOS-controlled Thyristors (MCTs); design of drive and snubber circuits, induction, permanent magnet-, and brushless dc-motor drives; and resonant inverters. Prerequisite: Graduate standing or (ELEG 3223 and ELEG 3003).

ELEG5623 Telecommunications (Irregular) Overview of public and private telecommunication systems, traffic engineering; communications systems basics, information technology, electromagnetics, and data transmission. Prerequisite: ELEG Graduate Standing or ELEG 3133. (Same as CSCE 5613)

ELEG5653 Artificial Neural Networks (Irregular) Fundamentals of artificial neural networks, both theory and practice. Teacher-assisted coursework and supervised and unsupervised learning, and how they are implemented using artificial neural networks. Topics include the perceptron, back propagation, the competitive Hanning net, self-organizing feature maps, topology and map updating, Kohonen’s self-organizing maps for orthogonal generalization, subpattern analysis, etc. Prerequisite: MATH 3403.

ELEG5663 Communication Theory (Irregular) Principles of communications. Channels and digital modulation. Optimum receiver and detectors. AWGN and fast fading channels. Coherent, non-coherent detectors and matched filters. Bounds on the performance of communications, and comparison of communications systems. Background in stochastic processes and probabilities, communication systems is desirable. Prerequisite: Graduate standing. May be repeated for credit.

ELEG6963 Wireless Communications (Irregular) Comprehensive course in fast developing field of wireless mobile/ cellular personal telecommunications. Topics include cellular system structures, mobile radio propagation channels, etc. Prerequisite: Graduate standing.

ELEG703F RF & Microwave Design (Irregular) An introduction to microwave design principles. Transmission lines, passive devices, networks, impedance matching, filters, dividers, and hybrids will be discussed in detail. Active microwave devices will also be introduced. In addition, the applications of this knowledge to related to radar and communication systems will be reviewed. Selected topics for device fabrication and measurements will be covered. Cannot get credit if student has taken ELEG 4703. Prerequisite: ELEG 3704.

ELEG707F Microwave Design (Irregular) This course is an advanced course in microwave design building on the introduction to microwave design course. A detailed discussion of active devices, biasing networks, mixers, detectors, Microwave Hybrid Circuits (MMICs) and Transmission Line band matching networks will be provided. In addition, a number of advanced circuits will be analyzed. Prerequisite: ELEG 3704 and ELEG 4703 or ELEG 5703.

ELEG7673 Advanced Electromagnetic Scattering & Transmission (Irregular) Reflection and transmission of electromagnetic waves through complex media; use of matrix theory to determine the complex and average power, the rectangular wave guides, TE and TM modes, radiation from antennas in free space and introduction to computational electromagnetics. Prerequisite: ELEG 3704 and ELEG 3703.

ELEG7773 Electronic Response of Biological Tissues (Irregular) Understand the electric and magnetic response of biological tissues with particular reference to neural and cardiovascular systems. Passive and active forms of electric signals in cell communication. We will develop the central electrical mechanisms from the membrane channel to the organ, building on those that are common to many electrically active cells in the body. Analysis will be based on Hodgkin-Huxley Model of action potential generation and propagation. High frequency response of tissues to microwave excitation, dielectric models for tissue heating, and Collinear and CoLe-Cole models. Role of bound and free water on tissue properties. Magnetic response of tissues. Experimental methods to measure tissue response. Applications to Electrocardiograph & Electrophrenic Microphoraphy. Microwave Monolithic Integrated Circuits (MMIC), and wideband matching networks will be provided. In addition, a number of selective topics for device fabrication and measurements will be covered. Cannot get credit if student has taken ELEG 4703. Prerequisite: ELEG 3704 or equivalent. (Same as BENG 5683)

ENDY5043 GIS Analysis and Modeling (Odd years, Sp) Advanced raster topics are examined with a theoretical and methodological review of Tomlin's cartographic modeling principles. Topics vary and include fourier methods, image processing, kriging, spatial statistics, principal components, fuzzy and neural networks, and multi-criteria decision models. Several raster GIS programs are examined with links to statistical analysis software. Prerequisite: (ANTH 4553 or GEOG 4553) or instructor permission. (Same as ANTH 4553, GEOG 4553)}
Su, Fa) The course focuses on developing reading and learning skills and strategies essential for college success with frequent writing assignments. All college textbooks in a variety of disciplines. University credit is earned, but the course does not count toward a degree. Required of students not meeting U of A reading placement standards.

ENGL1013H Honors Composition I (Fa) Prerequisite: ENGL 1013. The study of composition and research in composition and the humanities. Students will prepare a research paper and a final project. "A" in ENGL 1013 and ENGL 1023 (or equivalent courses from an accredited institution), by achieving a score of 5 or 6 on the AP Language and Composition Examination and the AP Literature Examination, or by achieving a 6 on the IB Exam in English in English. Cannot be counted toward a major in English. Prerequisite: ENGL 1013 and ENGL 1023.

ENGL1213 Introduction to Literature (Fa) Approaches to reading and writing about fiction, drama, and poetry at the college level. The criteria for effective written exposition in the scientific area. This course focuses on the literature either of a major literary period or a broad topical area related to literature and culture. Content varies. May be repeated for up to 9 hours of degree credit.

ENGL1303 Language and Expressive Culture (Irregular) This course explores the complex interrelationship of language, culture, and social identity. Verbal art and expressive culture are examined from a variety of anthropological perspectives. The study of a special topic in the field of modern and contemporary literature and culture. Content varies. May be repeated for up to 9 hours of degree credit.

ENGL3903 Special Topics (Irregular) Survey of a broad topical area related to literature and culture but not otherwise encompassed by the curriculum. Content varies. May be repeated for up to 9 hours of degree credit.

ENGL3923H Honors Colloquium (Irregular) Covers a special topic or issue. Offered as part of the honors program. Prerequisite: honor candidacy (not restricted to candidacy in English). May be repeated for credit.

ENGL399VH Honors Course (Irregular) (1-6) Prerequisite: ENGL 399VH. May be repeated for up to 6 hours of degree credit.

ENGL4003 English Language and Composition for Teachers (Fa) Subject matter and methods of approach for the teaching of composition in high school. Prerequisite: Undergraduate Fiction Workshop (Irregular) Gives close attention to individual manuscripts in a workshop environment. Prerequisite: ENGL 3013 or equivalent.

ENGL4023 Undergraduate Fiction Workshop (Irregular) Attention to individual manuscripts in a workshop environment. Prerequisite: ENGL 3013 or equivalent.

ENGL4073 Film Writing Workshop (Irregular) A workshop in writing the screenplay with close attention given to student manuscripts and adaptations. Prerequisite: Advanced standing.

ENGL4113 Undergraduate Independent Study (Irregular) Undergraduate original research and writing. Prerequisite: B' in ENGL and two other 300-level courses (21 hours of requirements for English major completed). May be repeated for up to 3 hours of degree credit.

ENGL4133 Writing Nature (Sp) Study of writings about nature, both scientific and literary. Examine the impact of each author's relationship with (and definition of) the natural world while examining the literary/aesthetic aspects of that experience. Prerequisite: ENGL 1023. May be repeated for up to 3 hours of degree credit.

ENGL4133H Honors Writing Nature (Sp) Study of writings about nature, both scientific and literary. Examine the impact of each author's relationship with (and definition of) the natural world while examining the literary/aesthetic aspects of that experience. Prerequisite: ENGL 1023. May be repeated for up to 3 hours of degree credit.

ENGL4143 American Film Survey (Irregular) A survey of American genres, major filmmakers, and major concepts in a work that have influenced the development of motion pictures. (Same as COMM 4143).

ENGL4213 Senior Research Seminar (Irregular) Seminar on a topic in literature in English with a substantial research paper required. May be repeated for up to 3 hours of degree credit.

ENGL4272 Undergraduate Fiction Workshop (Irregular) A workshop in writing the screenplay with close attention given to student manuscripts and adaptations. Prerequisite: Advanced standing.

ENGL4303 Introduction to Shakespeare (Sp, Su, Fa) Extensive reading in Shakespeare's comedies, histories, tragedies, and nondramatic poetry.

ENGL4503 Introduction to Literary Theory (Irregular) A historical survey of literary theory from Plato onwards.

ENGL4513 American Film Survey (Irregular) A survey of American genres, major filmmakers, and major concepts in a work that have influenced the development of motion pictures. (Same as COMM 4143).

ENGL4513 Undergraduate Fiction Workshop (Irregular) Attention to individual manuscripts in a workshop environment. Prerequisite: ENGL 3013 or equivalent.

ENGL4523 Undergraduate Fiction Workshop (Irregular) Attention to individual manuscripts in a workshop environment. Prerequisite: ENGL 3013 or equivalent.

ENGL4553 Studies in Literature and Gender (Irregular) The study of a special topic involving literature and gender. Content varies. May be repeated for up to 9 hours of degree credit.

ENGL4563 Topics in Major Authors (Irregular) The concentration of works by one or more major authors. At least one major paper will be required. Content varies. May be repeated for up to 9 hours of degree credit.

ENGL4573 Studies in Major Literary Movements (Irregular) This course focuses on the literature either of a major literary movement such as Romanticism or Modernism, or of a
University of Arkansas, Fayetteville

ENGL4603 Special Studies (Irregular) Concentrated study of a specific topical area related to literature and culture but not otherwise encompassed by the curriculum. Content varies. Prerequisite: May be repeated for credit.

ENGL4603H Honors Special Studies (Irregular) Concentrated study of a specific topical area related to literature and culture but not otherwise encompassed by the curriculum. Content varies. May be repeated for credit.

ENGL498V Senior Thesis (Irregular) (1-6)

ENGL5003 Composition Pedagogy (Fa) Introduction to teaching college composition. Designed for graduate assistants at 12 hours. Prerequisite: ENGL 5013.

ENGL5013 Creative Writing Workshop (Irregular)

ENGL5023 Writing Workshop: Fiction (Irregular)

ENGL5033 Writing Workshop: Poetry (Irregular)

ENGL5043 Translation Workshop (Irregular) Problems of translation and the role of the translator as both scholar and creative writer; involves primarily the discussion in workshop of the translations of poetry, drama, and fiction done by the students, some emphasis upon comparative studies of existing translations of well-known works. Primary material will vary. Prerequisite: reading knowledge of a foreign language. (Same as WLLC 504V) May be repeated for up to 15 hours of degree credit.

ENGL507V Creative Non-Fiction Workshop (Irregular) (1-3) The theory and practice of the “New Journalism” with a study of its antecedents and special attention to the use of “fictional” techniques. Focus on the craft of writing, major point of view to make something vivid about the real people and real events.

ENGL5083 Professing Literature (Irregular) An introduction to the profession of literary scholarship and the teaching of literature. Prerequisite: the articles they write.

ENGL510V Readings in English and American Literature (Irregular) (1-6) Open to Honors candidates and graduate students. May be repeated for credit.

ENGL5203 Introduction to English Literature and Culture (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5213 A History of the English Language (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5223 Studies in Renaissance Literature and Culture (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5233 Studies in Medieval Literature and Culture (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5243 Seminar in Special Topics (Irregular) Designed to cover subject matter not offered in other courses. May be repeated for credit.

ENGL5253 Craft of Fiction: I (Irregular) Such aspects of the genre as scene, transition, character, and conflict. Discussion is limited to the novel.

ENGL5273 Craft of Poetry: I (Irregular) An examination of perception, diction, form, irony, resolution, and the critical theories of the major writers on poetry, such as Dryden, Coleridge, and Arnold.

ENGL5283 Craft of Fiction: II (Irregular) Second part of the study of the techniques of fiction. Discussion is limited to the short story. Prerequisite: ENGL 5263.

ENGL5293 Craft of Poetry: II (Irregular) Second part of the study of the techniques of poetry; independent study of a poet or a problem in writing or criticism of poetry. Prerequisite: ENGL 5273.

ENGL5313 Introduction to Restoration and Eighteenth-Century British Literature and Culture (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5313 Introduction to Literary Theory (Irregular) An advanced introductory survey of a number of theoretical approaches to literature.

ENGL5343 Seminar in Eighteenth-Century British Literature and Culture (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5433 Seminar in Modern and Contemporary American Poetry (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5513 Seminar in Shakespeare and Renaissance Literature (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5613 Seminar in World Literature and Culture in the Nineteenth Century (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5633 Seminar in Renaissance and the Modern Novel (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5673 Seminar in Italian Literature and Culture (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL570V Seminar in Comparative Literature (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5723 Seminar in Twenty-First-Century American Literature and Culture (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5733 Seminar in East Asian and Central Asian Literatures and Cultures (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL5743 Seminar in Popular Culture and Popular Genres (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL589V Master's Thesis (Sp, Su, Fa) (1-6)

ENGL5913 Modern and Postmodern Fiction (Sp, Su, Fa) (1-6)

ENGL597V Doctoral Dissertation (Sp, Su, Fa) (1-18)

ENGL599V Literature and the Environment (Irregular) Subject matter changes depending on student interest and faculty expertise. May be repeated for up to 12 hours of degree credit.

ENGL698V Master's Thesis (Sp, Su, Fa) (1-6)

ENGL700V Doctoral Dissertation (Sp, Su, Fa) (1-18)

Course Descriptions

ENSC101L Environmental Science Laboratory (Fa) Labatory, field trip, and discussion sessions covering the conceptual and information allowing students to evaluate environmental issues. Topics will include: laboratory safety, recycling, composting, geographic information systems, soil testing, water quality, hazardous wastes, water disposal, wetlands, wastewater treatment, and sustainable food systems. Laboratory 2 hours/week. Prerequisite or Corequisite: ENSC 1003.

ENSC1003 Environmental Science (Fa) Series of lectures and discussions introducing the topic of environmental science. Prerequisite: May not be taken for natural science credit by students in Fulbright College. Course 2003.

ENSC3003 Introduction to Water Science (Sp) Properties, occurrence, and description of the types, functions, quality and quantity, potential contaminants, uses, and guiding policies and regulations of the various water resources in the environment. Prerequisite: ENGL 1023 and ENSC 1003 or CHEM 1023 or GEOG 1113 or higher or BIOL 1543.

ENSC3013 Plants and Environmental Restoration (Odd years, Fa) Selection, establishment, and use of plants to promote soil stabilization, water quality, and wildlife habitat. Principles and practices of many factors related to water, soil, and plant cover may not be taken for natural science credit by students in Fulbright College.

ENSC3030 Environmental Science Laboratory (Even years, Fa) The purpose of this laboratory is to complement lecture by carrying out experiments that familiarize students with methods used in soil and aquatic ecology. Students will collect samples, analyze and interpret data obtained from soil and water samples. Lab will meet once per week for 3 hours. Corequisite: ENSC 3223.

ENSC3223 Ecosystems Assessment Laboratory (Even years, Fa) The purpose of this laboratory is to complement lecture by carrying out experiments that familiarize students with methods used in soil and aquatic ecology. Students will collect samples, analyze and interpret data obtained from soil and water samples. Lab will meet once per week for 3 hours. Corequisite: ENSC 3223.

ENSC3223 Ecosystems Assessment (Even years, Fa) Application of ecological principles for EWS majors and college students interested in environmental science. Applications of the basic ecological principles of organisms, populations, communities, and ecosystems to gain an appreciation for how large scale patterns in terrestrial and aquatic ecosystems are influenced by small scale interactions among individuals (microorganisms to invertebrate macrofauna) and between individuals and their local environment. Lecture 3 hours per week. Prerequisites: ENSC 3201. Corequisites: ENSC 3201, CSES 2203, and ENSC 3003.

ENSC3263 Environmental Soil and Water Conservation (Even years, Fa) Effect of land use on water quality. Major agricultural management practices used to minimize water quality impacts. Corequisite: Lab component. Prerequisite: CSES 2203.

ENSC3413 Principles of Environmental Economics (Sp) An introductory, issues-oriented approach to the economics of the environment. What is involved in society making decisions about environmental quality will be studied. Environmental issues important to the State of Arkansas and the United States

Environmental Science (ENSC)

351
will be emphasized. Prerequisite: AGEC 1103 or ECON 2023. (Same as AGEC 3413)

ENSG3933 Environmental Ethics (Odd years, Sp) The course addresses ethical questions about nature and the natural environment. Topics of discussion include anthropocentric and biocentric worldviews, ethical obligations to animals and plants, natural rights, and the moral significance of biocultural items. Lecture 2 hours, laboratory 2 hours, seminar 2 hours. Corequisite: Prerequisite: ENSG 2933.

ENTO1031 Field and Laboratory Studies in Entomology (Even years, Sp) Field and laboratory study in physical, chemical, and biological characteristics of natural waters (rain, river, lake, soil, ground, etc.). Laboratory experiments in water sampling, measurement of water quality parameters such as pH, alkalinity and acidity, redox, hardness, BOD, TSS, etc., and instrumentation. Prerequisite or Corequisite: ENSC 2003 or ENSC 2010.

ENTO400V Special Problems (Irregular) (1-3) Work on special problems in entomological science or related fields. May be repeated for up to 8 hours of degree credit.

ENTO4021L Water Quality Laboratory (Fa) Field and laboratory experience in water sampling, measurement of water quality parameters such as pH, alkalinity and acidity, redox, hardness, BOD, TSS, etc., and instrumentation. Prerequisite: ENSC 2003 or ENSC 2010.

ENTO4043 Insect Ecology (Even years, Fa) To develop understanding of important ecological concepts through study of dynamic relationships among insects and their environment. To become familiar with the literature of insect ecology, and interpretation and critique of ecological research. Previous knowledge of basic entomology and/or ecology will be assumed. Corequisite: Lab component. (Same as BIOL 4043)

ENTO410V Special Topics (Irregular) (1-3) Special Topics course available to both undergraduate and graduate students, to address emerging issues and timely topics. This would supplement our graduate-only special topics course. May be repeated for credit.

ENTO4113 Insect Pest Management (Odd years, Sp) Study of principles and concept of insect pest management. Areas covered include survey of arthropod pests and damage, population dynamics, damage thresholds, physiological units, prediction models, surveillance, arthropod sampling, soil insects and tactics utilized to maintain pest populations below economic injury levels. Prerequisite: ENSC 4013.

ENTO4133 Advanced Applied Entomology (Even years, Sp) Biological and ecological role of major arthropod pests as input to applied management systems. Activities include independent study, literature review and group discussions. Knowledge of general entomology and pest management is required. Self-learning rules apply; students will be allowed to direct their own studies. Prerequisite: ENSC 4013.

ENTO4802 Internship (Irregular) (3-6) Supervised practical work experience in pest management to develop and demonstrate professional competence. A maximum of 6 hours credit per semester or summer session is permitted. Faculty approval of projects proposal prior to enrollment, and written or oral reports are required.

ENTO500V Special Problems (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

ENTO5013 Morphology of Insects (Odd years, Fa) Origin, evolution, and functional significance of external insect structure. Structure and function of major internal systems. Previous knowledge of basic entomology is helpful, but not required. Lecture 2 hours, laboratory 4 hours per week. Corequisite: Lab component.

ENTO5015 Special Topics (Irregular) (1-4) Topics not covered in other courses or a more intensive study of specific topics in entomology. Prerequisite: graduate standing. May be repeated for credit.

ENTO5123 Biological Control (Even years, Fa) Theoretical and practical basis for biological control of arthropod pests and weeds via parasites, predators, and pathogens. Lecture 2 hours, laboratory 2 hours, seminar 2 hours. Corequisite: Lab component.

ENTO5133 Applied Molecular Genetics (Even years, Fa) A hands-on course in applied molecular genetic techniques used in agricultural research including molecular diagnostics and population genetics. Students will learn how to apply advanced molecular genetic methodologies and Internet database resources to the organisms that they are using for their graduate research. Prerequisite: ANSC 3123. (Same as BIOL 3133)

ENTO600V Master's Thesis (Sp, Su, Fa) (1-6) Prerequisite: graduate standing. May be repeated for up to 6 hours of degree credit.

ENTO6113 Insect Physiology and Molecular Biology (Even years, Sp) Overview of insect physiology and modern molecular techniques to study physiological processes. Previous knowledge of basic entomology is helpful, but not required. Lecture 2 hours, laboratory 3 hours per week. Corequisite: Lab component.

ESRM6021 Insect Toxicology (Odd years, Fa) Toxicology of chemicals to insects and humans including techniques of testing collecting data, and factors that influence reactions to different classes of pesticides. Previous knowledge of basic entomology and/or physiology is helpful, but not required. Lecture 2 hours, laboratory 2 hours per week. Corequisite: Lab component.

ESRM6070V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: graduate standing.

ESRM5013 Research Methods in Education (Sp, Su, Fa) General orientation course which considers the nature of research problems in education and the techniques used by investigators in solving those problems. Prerequisite: graduate standing.

ESRM5393 Statistics in Education and Health Professions (Sp, Su, Fa) Application of statistical theories and techniques to health profession majors for both semesters. May be repeated for up to 6 hours of degree credit.

ESRM600V Master's Thesis (Sp, Su, Fa) (1-6) May be repeated for up to 6 hours of degree credit.

ESRM605V Independent Study (Sp, Su, Fa) (1-6) May be repeated for up to 6 hours of degree credit.

ESRM6423 Multiple Regression Techniques for Education (Fa) Introduction to multiple regression procedures for analyzing data as applied in educational settings, including multicol linearity, dummy variables, analysis of covariance, curvilinear regression and path analysis. Prerequisite: ESRM 6403.

ESRM6453 Applied Multivariate Statistics (Sp) Multivariate statistical procedures as applied to educational research settings including discriminant analysis, principal components factor analysis, canonical correlation, and cluster analysis. Emphasis on use of existing computer statistical packages. Prerequisite: ESRM 6413.

ESRM6513 Advanced Experimental Design (Irregular) Advanced topics of the general linear model, including hierarchical linear modeling and longitudinal analysis with a focus on developing the mathematical and theoretical basis for these methods. Prerequisite: ESRM 6413.

ESRM6523 Advanced Multiple Regression (Irregular) Advanced topics of correlation research methods, including logistic regression and path analysis with a focus on developing the mathematical and theoretical basis for these advanced techniques. Prerequisite: ESRM 6403.

ESRM6533 Qualitative Research (Sp, Fa) Introduction to qualitative research, including non-quantitative methods, including data collection through interviews, field observation, records research, internal and external validity, and interpretive problems in qualitative research. Prerequisite: ESRM 6403.

ESRM6543 Advanced Qualitative Research (Sp) Preparation for the conduct of qualitative research, structuring, literature reviews, data collection and analysis, and reporting results. Prerequisite: ESRM 6533. May be repeated for up to 6 hours of degree credit.

ESRM6553 Advanced Multivariate Statistics (Irregular) Multivariate statistical procedures as provided in Multivariate and Introduction to methods that extend methodological elements of canonical, discriminant, factor analytic, and longitudinal analyses, providing the mathematical and theoretical foundations necessary.
ETEC5203 Foundations of Educational Technology (Sp, Su, Fa) Provides learners with a comprehensive survey of the major trends, issues, people, processes, and products that have significantly affected the evolution of the field of educational technology.

ETEC5213 Introduction to Educational Media (Sp, Su, Fa) Instruction in selecting, utilizing and evaluating instructional materials and equipment. Prerequisite: Graduate standing.

ETEC5223 Instructional Design Theory & Models (Fa) A study of the instructional development process as it pertains to the design and production of instructional materials which use modern technologies. Goal analysis, objectives, evaluation, instruction, production, assessment, revision of instructional materials, and revision of the instructional materials are considered. Prerequisite: Graduate standing.

ETEC5253 Information Technologies (Irregular) Students perform a hands-on analysis of the role of new technologies and their implications for instructional practice. Emphasis is on identification and evaluation of new technologies in instructional environments. Establishing and maintaining learning environments, exploring selected theories and concepts, assessing potential uses of IT, and utilization of new technologies will occur.

ETEC5263 Grant Writing in Instructional Technology (Sp, Su, Fa) Students will have the opportunity to find grant funding sources, write a grant, and submit an actual grant proposal to an agency for consideration. Will survey research in instructional media over the past 60 years and learn specific criteria for writing and evaluating research reports and articles. Investigate current issues and topics related to research and grant writing in instructional media.

ETEC5283 Field Experiences in Educational Technology (Sp, Su, Fa) Field experience in educational technology settings. Prerequisite: Graduate standing and 6 hours of graduate work in educational technology.

ETEC5303 Learning with Computers in K-12 Classrooms (Irregular) Students learn how technology can be used to support K-12 classroom environments. Various learning theories and technologies will be explored and projects will be developed that utilize technologies and current learning theories in K-12 classrooms. Identifying, evaluating, and utilizing the effective use of technologies to support classroom environments. Prerequisite: Graduate standing.

ETEC5313 Principles in Visual Literacy (Irregular) Students gain understanding of visual literacy and learn to create graphics that support learning. Literature in the area of visual literacy and theory concerning design as tools that facilitate effective visual literacy will be used to create visuals that are clear, communicate well, and help enhance learner performance.

ETEC5373 Web Design (Irregular) Students design, create, and analyze Web sites by applying processes, standards and techniques used to identify target audience; ensure compliance with copyright and disabilities laws, measure effectiveness, and coordinate Web design. Topics include copyrighting and fair use, user and task analysis, usability, accessibility, testing, search engine optimization, and web analytics. May be repeated for up to 3 hours of degree credit.

ETEC5743 Internship The internship is a supervised field placement in educational technology that provides experience consistent with the student's professional goals and training emphasis. Internship experiences are planned and directed by the instructor and include independent or collaborative research relevant to the student's major emphasis. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

ETEC5981 Eportfolio Production (Sp, Su, Fa) This is a capstone course designed to: 1) review key constructs presented within the Educational Technology curriculum; 2) provide ETEC students the opportunity for reflection relative to his/her learning of the key concepts; and 3) utilize technology to assemble an electronic portfolio that substantiates the key concepts. Prerequisite: Must be in last semester of coursework.

ETEC5993 Seminar (Irregular) This course is designed to: 1) review key concepts presented within the Educational Technology curriculum; 2) provide ETEC students the opportunity for reflection relative to his/her learning of the key concepts; and 3) utilize technology to assemble an electronic portfolio that substantiates the key concepts. Prerequisite: Must be in last semester of coursework.

ETEC5999 Seminar (Irregular) Prerequisite: advanced graduate standing. May be repeated for up to 6 hours of degree credit.

ESRM670V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy.
Course Descriptions

- **Finance (FINN)**

**FINN1003 Your Money and Credit (Sp, Su, Fa)** Introduction to personal finance. Topics include building wealth, do's and don'ts of credit, and car and home ownership. Lectures on theory and concepts; learning from the masters' videos on best practices; financial simulations and case exercises.

**FINN3003 Personal Financial Management (Sp, Fa)** Topics covered include budgeting, financial planning, managing credit, taxes, insurance, investments, and retirement planning. Prerequisite: FINN3003.

**FINN3013 Financial Analysis (Sp, Su, Fa)** Focuses on how information contained in financial statements can be used in financial decision-making; in particular, to assess financial performance, evaluate credit and default risk, forecast future funds needs, weigh the risk-reward of debt vs. equity financing, and develop estimates of intrinsic value using relative valuation metrics and discounted cash flow methods. Prerequisite: FINN2043.

**FINN3053 Financial Markets and Institutions (Sp, Su, Fa)** Role and operations of financial markets and institutions in the economy. Supply of, demand for, funds, interest rates and the flow of funds. Financial policies, practices of depository and nonbank financial institutions. Prerequisite: FINN2043 or ECON 2143.

**FINN3063 Investments (Sp, Su, Fa)** Introduction to basic investment concepts including risk-return and mean-variance efficient frontier, diversification and the pricing of risk, security valuation. Prerequisite: WCOB 2043 and FINN3013.

**FINN3103 Financial Modeling (Sp, Su, Fa)** Develop strong computer skills in financial analysis by integrating conceptual material with spreadsheet-based numerical solution and simulation techniques. Prerequisite: FINN3063 or consent of the instructor.

**FINN3133 Commercial Banking (Sp, Fa)** Commercial bank administration, management; loans; bond portfolios; credit analysis; public relations; analysis and interpretations of Federal Reserve and other regulatory publications. Prerequisite: WCOB 2043.

**FINN3303 Corporate Finance (Sp, Su, Fa)** Develop analytical competencies in financial planning, cost of capital estimation, application of discounted cash flow approach to valuation and capital allocation, lease analysis, evaluation of merger and organizational restructuring strategies. Prerequisite: WCOB 2043 and FINN3013.

**FINN4003 Risk Management (Sp, Fa)** A survey of the extent and types of risk in business; ways of dealing with business risk; use of security and commodity exchanges; survey of insurance for risk bearing purposes.

**FINN4010 International Finance (Sp, Fa)** Introduction to international financial markets, exchange rates and exchange rate determination, balance of trade measures, and vehicles for foreign trade financing.

**FINN5393 Real Estate Principles (Sp, Fa)** Comprehensive, covering economics of real estate, real estate value, real estate finance, rights in real property and their transfer, public programs, policies relating to real property.

**FINN4010 Special Topics in Finance (Irregular)** (1-6) Explores important concepts and significant events and/or new developments in the field of Finance. Prerequisite: Senior standing.

**FINN4013 Seminar in Personal Financial Planning (Sp)** Focuses on current events, new developments and topics in Finance not covered in other courses. Prerequisite: FINN 3013. May be repeated for credit.

**FINN4133 Advanced Investments (Sp)** Sound training in investment analysis in the context of security analysis, security valuation and portfolios management. Prerequisites: FINN 3003, FINN 3063, FINN 3823, and ACC 3843.

**FINN4140 Portfolio Management I (Fall)** This course applies modern investment theory to the practical management of the Rebsamen Trust. Students prepare a statement of investment objectives, recommend an asset allocation strategy based on a quantitative analysis of asset classes, and select securities using fundamental analysis. Classes are organized as management meetings and visits to investment firms are an important part of the class. Selection is by invitation. Corequisites: FINN 3723 and ACC 3723. Prerequisite: FINN 3063 and by invitation only.

**FINN4153 Portfolio Management II (Sp)** This course is a continuation of FINN 4140. Topics covered include technical and fundamental asset allocation strategies. Visits to major investments firms and organized exchanges in New York City or other locations are generally planned. Selection is by invitation. Prerequisite: FINN 4143 and by invitation only.

**FINN4163 Fixed Income Securities I (Fa)** The markets and institutional settings of fixed income securities; valuation and risk analysis of money market and capital market instruments; strategies and management of bond portfolios; taxable and tax-exempt securities; U.S. and non-U.S. fixed income securities; term structure of interest rate; and interest rate derivatives as hedging tools. Prerequisite: FINN 3013 and FINN 3063.

**FINN4173 Fixed Income Securities II (Sp)** Continuation of FINN 4163. The markets and institutional settings of fixed income securities; valuation, and risk analysis of money market and capital market instruments; strategies and management of bond portfolios; taxable and tax-exempt securities; U.S. and non-U.S. fixed income securities; term structure of interest rate; and interest rate derivatives as hedging tools. Prerequisite: FINN 4163.

**FINN4183 Advanced Corporate Finance (Irregular)** Addresses complex and multifaceted issues and problems in financial decision-making. Prerequisite: FINN 3603.

**FINN4313 Advanced Commercial Banking (Sp)** Problems and principles of commercial and industrial lending and techniques in decision making process. Determination of operating policies regarding loans, investments, liquidity, capital; efficient performance of lending, investment function; profit...
FINN433 Seminar in Financial Management and Institutions (IRREGULAR) Recent developments in the literature of financial markets and institutions. Participants will be involved in the extensive study of existing theories and empirical tests of the theories.

FINN63V Current Issues in Doctoral Colloquium (SP, SU, FA) (1-3) To explore and evaluate contemporary research issues in finance. Course content to reflect the most recent developments in theory and empirical research methodologies. Prerequisite: Doctoral student status and instructor consent. May be repeated for up to 18 hours of degree credit.

FINN700V Dissertation (SP, FA) (1-18) Prerequisite: Candidacy.

FREN1003 Elementary French I (SP, FA) Further develop advanced reading skills. Prerequisite: FINN 5223.

FREN1013 Elementary French II (SP, FA) Further intensive practice for the purpose of strengthening written and oral expression. Includes all aspects of French grammar. Prerequisite: FREN 1003 or equivalent.

FREN2003 French Conversation (FA) Three hours per week of guided conversation practice for the post-intermediate students. Prerequisite: FREN 1013.

FREN2036 Ph.D. Reading Requirement I (SU) A course designed to build vocabulary and to strengthen reading skills and oral expression through extensive reading with culturally authentic materials. Prerequisite: FREN 2003.

FREN2113 Introduction to Literature (SP) Further development of reading skills and introduction to literary commentary and analysis. Prerequisite: FREN 2003 or 2103.

FREN289H Honors French Course (SP, FA) (1-4) Prerequisite: Junior standing. May be repeated for up to 12 hours of degree credit.

FREN3003 Advanced French (SP, SU, FA) (1-3) A comprehensive study of French poetry from the Middle Ages to the twentieth century. Prerequisite: FREN 5113 or FINN 5223.

FREN3033 French 16th-Century Literature (IRREGULAR) An introduction to the French short story, focusing on close readings of a variety of contes and nouvelles from the Middle Ages through the twenty-first century.

GEOG3003H Honors Conservation of Natural Resources (Even Years, SP) (1-2) An intensive study of durable building materials, their landforms; its winds and currents as related to the atmosphere, and its biota, emphasizing its landforms; its winds and currents as related to the atmosphere, and its biota, emphasizing the natural factors of the environment and man's activities, especially in their historical, ecological, political, social, educational, and recreational aspects.

GEOG4243 Studies in Francophone Literature (IRREGULAR) An intensive study of French poetry from the Middle Ages to the twentieth century, focusing on close readings of individual poems. This course will cover literary movements and trends of the periods and presents the terminology required to do exegesis de texte.

GEOG5133 French 18th-Century Literature (IRREGULAR) A survey of representative writers of the sixteenth century.


GEOG5633 French Short Story (IRREGULAR) An introduction to the French short story, focusing on close readings of a variety of contes and nouvelles from the Middle Ages through the twenty-first century.
Systematic study of the geographical distribution of economic activities in the countries of the North American Free Trade Agreement region. Prerequisite: Senior standing.

GEOG3383 Principles of Landscape Evolution (Fa) Examines the role of waves, rivers, wind, and tectonics in shaping and modifying the surface of the earth. Considers the way in which current landscape processes contribute to the effective solution of environmental problems. Lecture 3 hours. May be repeated for up to 3 hours of degree credit.

GEOG3923H Honors Colloquium (Irregular) Covers a special topic issue, offered as part of the honors program. Prerequisite: Honors candidacy (not restricted to candidacy in geography). May be repeated for credit.

GEOG399VH Honors Course (Irregular) (1-6) Prerequisite: Junior standing. May be repeated for up to 12 hours of degree credit.

GEOG4023 Fallen Temples & Forgotten Gods: Cultural Geography of Ancient Religions (Fa) A global survey of ancient religious life.

GEOG4033 Geography of the Middle East (Irregular) Physical and cultural landscapes, natural and cultural resources, art and architecture, land use, political history, OPEC, and current problems of North Africa and the Middle East region west of Afghanistan are discussed. Class participation, discussions, slides and films, and student presentations will round out the class. Prerequisite: Junior standing.

GEOG4037 Principles of the Middle East (Irregular) Physical and cultural landscapes, natural and cultural resources, art and architecture, land use, political history, OPEC, and current problems of North Africa and the Middle East region west of Afghanistan are discussed. Class participation, discussions, slides and films, and student presentations will round out the class. Prerequisite: Junior standing.

GEOG4053 Elements of Weather (Fa) Examination of the atmospheric processes that result in multifarious weather phenomena. Prerequisite: Graduating standing.

GEOG5010 Special Problems in Physical Geography (Sp, Su) (1-6) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

GEOG5073 Planetary Atmospheres (Irregular) Special topics, the nature of which varies with the need. Prerequisite: Graduate standing. May be repeated for up to 3 hours of degree credit.

GEOG5085 Colloquium (Sp) Weekly meetings of faculty, graduates, advanced students and guests to discuss research and trends in the field of geography. May be repeated for up to 2 hours of degree credit.

GEOG5093 History of Geography (Even years, Sp) Chronological development of the science; leaders in the field of geography; and the evolution of the major concepts of geography. Prerequisite: Graduate standing.

GEOG510V Special Problems in Physical Geography (Sp, Su) (1-6) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

GEOG5113 Elements of Geochemistry (Fa) Examines central issues of global change including natural and human induced climate change, air pollution, deforestation, desertification, wetland loss urbanization, and the biodiversity crisis. The U.S. Global Change Research Program is also examined. (Same as ENGY 5113)

GEOG520V Special Problems in Human Geography (Sp, Su) (1-6) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

GEOG530V Special Problems in Regional Geography (Sp, Su) (1-6) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

GEOG5503 Research Methods and Materials in Geogra-phy (Odd years, Fa) Geographical research and the preparation of research papers. Prerequisite: Graduate standing.

GEOG600V Master's Thesis (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing.

GEOG6111M Honors General Geography Laboratory (Fa) Survey of geological processes and their relationship to landforms, natural resources, living environments, and interactions of human beings with the environment. Lecture 2 hours, laboratory 2 hours per week. Corequisite: GEOL 1113 H. (Same as GEOL 1111L)

GEOG6111L General Geography Laboratory (Sp, Su, Fa) Laboratory exercises concerning the identification of rocks and minerals, use of aerial photographs and topographic maps, and several field trips. Pre- or corequisite: GEOL 1113.

GEOG6113 General Geography (Sp, Su, Fa) Survey of geological processes and their relationships to landforms, natural resources, living environments, and human beings. Lecture 3 hours, laboratory 2 hours per week. Coreq- uisite: GEOL 1111 M.

GEOG6113L Environmental Geology Laboratory (Sp) Laboratory exercises concerning human interactions with the physical environment including the study of earthquakes, volcanoes, flooding, erosion, mass wasting, water supply and contamination, and waste disposal. Prerequisite: GEOL 1113 and GEOL 1111L.

GEOG6113C Environmental Geography (Sp) The application of geologic principles and knowledge of processes created by human occupancy and exploitation of the physical environment. Prerequisite: GEOL 1113 and GEOL 1111L.

GEOG6231 Mineralogy and Petrology (Fa) General principles of mineralogy and petrology, study and identification of common minerals, igneous & metamorphic rocks using hand samples. Corequisite: Lab component. Prerequisite: GEOL 1113.

GEOG3002 Geology of Engineers (Fa) Geologic principles involved in construction, reservoir location, etc. Lecture 2 hours, laboratory 2 hours per week. Corequisite: Lab compo- nent.

GEOG3032 Geology of Arkansas (Sp) A survey of the distribution of minerals, rocks, fossils, structures, landforms and geological processes of Arkansas. Equivalent to two hours of lecture per week. Field trips required. Prerequisite: GEOL 1113 or GEOL 1113H.

GEOG3114 Geomorphology (Sp) Survey of the in- vertebrate phylum commonly preserved as fossils emphasizing their physical and biological characteristics. Lecture 3 hours, laboratory 2 hours per week. Corequisite: Lab component.

GEOG3113 Igneous and Metamorphic Rocks (Sp) A descriptive study and classification of igneous and metamorphic rocks. Lecture 2 hours, laboratory 2 hours per week. Corequi- site: Lab component. Prerequisite: GEOL 2033.

GEOG3114 Sedimentary Rocks and Fossils (Sp) An introduc- tory study of sedimentary rocks and fossils from the standpoint of classification, field and laboratory description, genesis, and preservation. Lecture 2 hours, laboratory 2 hours per week. Corequisite: Lab component. Prerequisite: GEOL 2033.

GEOG3115 Structural Geology (Sp) Survey of deformational features and their geological significance in the crust of the earth. Lecture 3 hours per week. Corequisite: Lab component. Prerequisite: GEOL 2033.

GEOG3116 Geomorphology (Sp) Survey of geomorphological processes and their geological significance in the crust of the earth. Lecture 3 hours, corequisite. Lab component. Prerequisite: GEOL 2033.

GEOG3134 Volcanology (Irregular) A broad introduction to volcanic processes and their associated hazards. Emphasis will be placed on applying basic physical and chemical prin- ciples to understanding volcanic systems. Prerequisite: GEOL 2033.

GEOG4666 Geology Field Camp (Su) An advanced course for graduate students. Prerequisite: GEOL 2033 or GEOL 3115.

GEOG481V Cooperative Education Program (Sp, Su, Fa) (1-6) Credit for off-campus, compensated work experience re-
The class integrates science with philosophy, politics, economics, policy, and law, drawing on award-winning films, current news, and case studies.

GEOS4693Hons Environmental Justice (Sp) This course deals with the ethical, environmental, legal, economic, and social implications of society’s treatment of the poor, the disenfranchised, and minorities who live in the less desirable, deteriorating neighborhoods, communities, and niches of our country. The class integrates science with philosophy, politics, economics, policy, and law, drawing on award-winning films, current news, and case studies.

GEOS4693Hons Environmental Justice (Sp) This course deals with the ethical, environmental, legal, economic, and social implications of society’s treatment of the poor, the disenfranchised, and minorities who live in the less desirable, deteriorating neighborhoods, communities, and niches of our country. The class integrates science with philosophy, politics, economics, policy, and law, drawing on award-winning films, current news, and case studies.

The class integrates science with philosophy, politics, economics, policy, and law, drawing on award-winning films, current news, and case studies.

GEOS4693Hons Environmental Justice (Sp) This course deals with the ethical, environmental, legal, economic, and social implications of society’s treatment of the poor, the disenfranchised, and minorities who live in the less desirable, deteriorating neighborhoods, communities, and niches of our country. The class integrates science with philosophy, politics, economics, policy, and law, drawing on award-winning films, current news, and case studies.

GEOS4693Hons Environmental Justice (Sp) This course deals with the ethical, environmental, legal, economic, and social implications of society’s treatment of the poor, the disenfranchised, and minorities who live in the less desirable, deteriorating neighborhoods, communities, and niches of our country. The class integrates science with philosophy, politics, economics, policy, and law, drawing on award-winning films, current news, and case studies.

GEOS4693Hons Environmental Justice (Sp) This course deals with the ethical, environmental, legal, economic, and social implications of society’s treatment of the poor, the disenfranchised, and minorities who live in the less desirable, deteriorating neighborhoods, communities, and niches of our country. The class integrates science with philosophy, politics, economics, policy, and law, drawing on award-winning films, current news, and case studies.

GEOS4693Hons Environmental Justice (Sp) This course deals with the ethical, environmental, legal, economic, and social implications of society’s treatment of the poor, the disenfranchised, and minorities who live in the less desirable, deteriorating neighborhoods, communities, and niches of our country. The class integrates science with philosophy, politics, economics, policy, and law, drawing on award-winning films, current news, and case studies.
Course Descriptions

GERG4443Geronotology (Gerontology) (Sp, Fa) Physiological and psychological development of the aging individual, extended family relations, service networks for the elderly, and retirement activities. Some attention given to housing and care needs of persons in advanced years. Lecture 3 hours per week. Seminar format. Prerequisite: Graduate standing.

GERG4003 Advanced German II (Sp) Further development of reading, writing, listening, and speaking skills. Some grammar review and translation exercises. Emphasis on vocabulary acquisition and the correct use of idiomatic expressions. Prerequisite: GERG 3063.

GERG4003 Advanced German II (Sp) Further development of reading, writing, listening, and speaking skills. Some grammar review and translation exercises. Emphasis on vocabulary acquisition and the correct use of idiomatic expressions. Prerequisite: GERG 3063.

GERG4013 Germany and the Holocaust: The Significance of the Holocaust in Differentiated Contexts (Irregular) Taught in English. Topics covering the role of the Holocaust in Germany, the German culture, art, language, and German Studies. Equal emphasis will be placed on historical competence and philosophical/theoretical inquiry, addressed from a variety of media and primary and secondary sources. May be repeated for up to 6 hours of degree credit.

GERG4043 German Cinema (Irregular) Presents a range of German films in cultural-historical context; vocabulary and structures for discussing film, film history, and film theory in German. Prerequisite: GERG 3003.

GERG4123 The German Novelle (Irregular) An intensive study of the novelle as a genre from its origin to the present. Prerequisite: GERG 3013.

GERG4123 The Drama of the Drama (Irregular) A study of the development of the forms and themes of the German drama from the middle ages to the present. Prerequisite: GERG 3013.

GERG4143 German Lyric Poetry (Irregular) A study of the forms and themes of German lyric poetry from the middle ages to the present. Prerequisite: GERG 3013.

GERG4213 German Civilization (Irregular) Prerequisite: GERG 3013 or equivalent.

GERG4333 Business German I (Fa) Introduces students to the language of business in German and provides insights into business practices in the German-speaking countries. Covers aspects of business geography, the European Union, transportation/shiping, business correspondence, resume writing and job applications, and the legal system. No business prerequisite. Prerequisite: GERG 3013. May be repeated for up to 6 hours of degree credit.

GERG470V Special Topics (Irregular) (1-3) May be offered in a topic not specifically covered by courses otherwise listed. May be repeated for up to 6 hours of degree credit.

GERG475V Special Investigations (Irregular) (1-4) May be repeated for credit.

GERM225 Early German Literature: Middle Ages to the Enlightenment (Irregular) A study of the forms and themes of German lyric poetry from the middle ages to the present. Prerequisite: GERG 3013.

GERM2573 German Literature: Enlightenment, Storm and Stress, and Classicism (Irregular) A study of the forms and themes of German lyric poetry from the middle ages to the present. Prerequisite: GERG 3013. May be repeated for up to 6 hours of degree credit.

GERM523 Early Modern German Literature: Late 19th and Early 20th Century (Irregular) A study of the forms and themes of German lyric poetry from the middle ages to the present. Prerequisite: GERG 3013.

GERM5363 German Literature after 1945 (Irregular) A study of the forms and themes of German lyric poetry from the middle ages to the present. Prerequisite: GERG 3013.

GNEG3101 Fundamentals of Success in Engineering Study (Irregular) Assisting Engineering First Year students in developing skills for successful completion of engineering coursework. Building a supportive learning community, assisting student in developing productive work habits, and providing homework and test-taking skills to problems in the real-world environment. Prerequisite: Engineering First Year students enrolled in the Honors College. Corequisite: GERG 5111H and GNEG 5111H. May be repeated for up to 12 hours of degree credit.

GNEG3101H Honors Research Colloquium (Fa) Exploration of topics and processes associated with academic research in the engineering profession. Offered to a select group of Engineering First Year students enrolled in the Honors College. Corequisite: GNEG 1111H and GNEG 1111H.

GNEG3111H Honors Research Experience I (Fa) An initial undergraduate research experience for a select group of Engineering First Year students enrolled in the Honors College. Corequisite: GNEG 1111H and GNEG 1111H.

GNEG3122H Honors Research Experience II (Fa) Continuation of GNEG 1111H culminating with the annual Freshman Engineering Program Honors Research Symposium. Corequisite: GNEG 1121H. Prerequisite: GNEG 1111H.

GNEG3801 Internship (Sp, Su, Fa) Supervised experience in industry where students can learn to apply classroom skills to real-world environment. Conducting business with emerging nations. Case studies; field trips; guest lectures. Experiential learning design component. Taken by students participating in departmental approved study abroad programs. May not earn credit for GNEG 4103 or 5103.

GNEG3811 Cooperative Education (Sp, Su, Fa) Supervised experience in industry where students can learn to apply classroom skills to real-world environment. Conducting business with emerging nations. Case studies; field trips; guest lectures. Experiential learning design component. Taken by students participating in departmental approved study abroad programs. May not earn credit for GNEG 4103 or 5103.

GNEG4103H Honors Globalization and Innovation (Irregular) Integration of engineering in the globalized business environment. Prerequisites: Instructor consent. May be repeated for up to 4 hours of degree credit.

GNEG430V Special Topics (Irregular) (1-4) Consideration of current engineering topics not covered in other courses. Prerequisite: Instructor consent. May be repeated for up to 4 hours of degree credit.

GNEG490VH Honors Special Topics (Irregular) (1-4) Consideration of current engineering topics not covered in other courses. Prerequisite: Instructor consent. May be repeated for up to 4 hours of degree credit.

GNEG5013 Master's Research Project (Irregular) (1-3) Required course for MSE students in the globalized business environment. Prerequisite: Departmental consent. May be repeated for up to 12 hours of degree credit.

GNEG5103H Honors Globalization and Innovation (Irregular) Integration of engineering in the globalized business environment. Prerequisites: Instructor consent. May be repeated for up to 4 hours of degree credit.
GREK400V Research Experience Undergraduate Internship (Su) (1-6) Internship for students participating in an undergraduate research experience. May be repeated for up to 12 hours of degree credit.

GREK4005 The Professoriate: Teaching, Learning and Assessment (Sp) Designed to introduce the future academic professional to the expectations of the faculty teaching role in higher education. Topics include techniques of effective teaching, managing a diverse classroom, dealing with a variety of institutional expectations, course management issues, and using models of effective teaching across a broad spectrum of class sizes and levels.

GREK4103 Field Experience in Gerontology (Irregular) Supervised field experience/practicum in field setting. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

GREK4103 Practicum for Future Faculty (Irregular) This course is designed to follow GRSD 5003 and to give participants opportunities to apply theories and methods learned in that course. To accomplish these goals, the course instructor helps the participant arrange a mentoring opportunity as part of this course. Prerequisite: GRSD 5003. May be repeated for up to 6 hours of degree credit.

GRSD502V Special Topics in Preparing Future Faculty (Irregular) (1-3) Seminar and special topics for those anticipating entering a teaching career in higher education. May be repeated for up to 6 hours of degree credit.

GRSD503 The Professoriate: Research and Service (Fa) Designed to complete GRSD 5003 by focusing on topics of interest to future academic professionals beyond those related to instruction. Topics include developing a research statement, strategies for securing an academic position, the nature of employer and employment expectations in higher education, research ethics, and funding issues, including grant proposal writing.

Human Environmental Sciences (HESC)

HESC1201 Introduction to the Dietetic Profession (Sp, Fa) Designed to complement GRSD 5003 by focusing on topics of interest to future academic professionals beyond those related to instruction. Topics include developing a research statement, strategies for securing an academic position, the nature of employer and employment expectations in higher education, research ethics, and funding issues, including grant proposal writing.

HESC1213 Family Relations (Sp, Fa) Courtroom, marriage, and parenthood in the United States, with attention to cultural and psychological factors which affect relations among family members. On-campus and Web-based delivery sections are available. Lecture 3 hours per week. Pre- or corequisite: HESC 1501 (applies to HESC majors only). Corequisite: HESC 2111L. Prerequisite: HESC 1213 or CHEM 1073 (or CHEM 1103 or CHEM 1213).

HESC2203 Sports Nutrition (Sp) The integration of concepts from nutrition and exercise physiology into an applied multidisciplinary study of how food, beverages and dietary supple- ments influence physical performance. Prerequisite: HESC 1213.

HESC2413 Family Relations (Sp, Fa) Courtroom, marriage, and parenthood in the United States, with attention to cultural and psychological factors which affect relations among family members. On-campus and Web-based delivery sections are available. Lecture 3 hours per week. Pre- or corequisite: HESC 1501 (applies to HESC majors only).

HESC2433 Child Development (Sp, Fa) Theory, research, and application in physical, cognitive, social, and emotional development of the child, student, and the family. Emphasis is given with prenatal development and continues through adoles- cence, with special emphasis on early and middle childhood. Prerequisite: HESC 1403 or PSYC 2003.

HESC255V Special Topics (Irregular) (1-6) Topics not cov- ered in other courses or a more intensive study of specific
course offers students the opportunity to acquire the knowledge and skills necessary to provide the front desk services of a lodging establishment. Emphasis is placed on the identification of front desk service components. Course includes: service, food production and use of equipment will also be covered as well as sanitation, maintenance and comparison of personnel requirements. Observation of and experience with quantity food production and use of equipment will also be covered in this course. Course includes: service, front desk service components. Prerequisite: HESC 1213, HESC 2112, HESC 2111L, and HESC 2603.

Course Descriptions
Professions (Fa) Planning, developing, operating, and evaluating programs in the helping professions, including child care and family-related agencies. Emphasis will be on administrators’ roles as leaders in organizations. Topics include facilities, budget, staff development, and policy matters. Prerequisite: HDFS major and senior standing or permission from instructor.

HESC4472L Child Development Practicum (Sp) Actual experience facilitating children’s learning with classroom teachers, related to the course. Planning with parents and planning, implementing, and evaluating directed experiences with children ages 3-5 in an NAECY accredited laboratory setting – U. of A. Nursery School, 2 hours lecture per week. Corequisite: HESC 4472L. Prerequisites: HESC 3402 and HESC 3401L and HESC 2403.

HESC4483 Internship in Human Development and Family Studies (Sp, Su, Fa) The internship experience provides practical experience for students in settings that are designed to serve the needs of individuals and/or families across the life span. Students must work a minimum of 60 hours per credit hour in the setting. Must be taken no sooner than the summer following completion of junior year. May be taken for an additional 3 hours of elective credit if second experience is distinctly different from first. Prerequisite: GPA Greater or Equal to 2.75. May be repeated for up to 3 hours of degree credit.

HESC4492L Health Careers Practicum (Sp) Actual experience utilizing computer and communication skills to work with children and families. Topics: strategies for advocacy will be emphasized. Lecture three hours per week. Corequisite: RSOC 2603 or SOCI 2013.

HESC4500V Special Topics (Irregular) (1-6) Topics not covered in other courses, a focused study of specific topics in the students’ areas of concentration. May be repeated for up to 6 hours of degree credit.

HESC4523 Hospitality Operations and Financial Analysis (Sp) This course is an in-depth, comprehensive study of hospitality operations, with emphasis on financial statements and other accounting reports that are usually used by management staff for making decisions. It includes the application of computer software and human resource management skills. Corequisite: HESC 3633. Prerequisite: AGEC 2142/2141L or WCOB 1023.

HESC4515 Meetings, Events and Convention Management (Fa) Focuses on the planning and management of meetings and conventions in the hospitality industry. Includes catering in food service operations & management for on-premise and off-premise. Course content will also cover working with contract managers and events-related experience. Lecture. Corequisite: AGEC 3303 or MKTG 3433. Prerequisite: HESC 1603.

HESC4633 Hospital Finance (Sp) This course is designed to provide students with knowledge of the future history of travel, explores the future direction and discusses the components of tourism from a global perspective. An overview of tourism planning at the global level will be presented. A variety of planning theories, procedures and processes, the diverse needs of travelers, destination communities, hospitality organizations, public non-governmental organizations, and the private sector will be introduced in this class. Prerequisite: HESC 1603 and PSYC 2003 or SOCI 2013.

HESC4663 Issues & Trends in Hospitality & Tourism (Sp) A study of world trends, issues, and the current state of the industry as well as predictions for the future of lodging, cruise, restaurant, tourism, technology, travel and tourism industries with applications to forecasting change in the hospitality and tourism industries. Prerequisite: HESC 1603.

HESC4673 Destination Marketing & Operations (Sp) This course is designed to provide students with a basic understanding of the history of the tasks and processes involved in running a successful destination management organization (DMO). The course places heavy emphasis on destination marketing. Prerequisite: HESC 2403.

HESC4683 Food and Wine Management, Service and Evaluation (Fa) This course provides students with knowledge of the sensory relationships of wine and food and the important role this understanding plays in building a competitive and economically self-sufficient restaurant and tourism industries. Course topics will include developing and marketing the wine-food tourism product, wine and food pairing as a hierarchical process, gastronomic identity. Old and New World wines will be studied in relation to food and wine, and promoting Arkansas food and wine. Students must have senior standing and be at least 21 years old. Students are required to complete an alcohol compliance education program prior to taking course. Students who may not imbibe for any reason should speak with the instructor about an accommodation. Prerequisites: Senior standing, hospitality major, completion of alcohol compliance education program, HESC 2112/2111L, and HESC 2403.

HESC4683 Hospitality Management Internship (Sp, Su, Fa) Supervised experience in an instructor approved work/learning situation relating to the hospitality industry in multiple aspects of a hospitality organization. Emphasis on application of knowledge and skills to actual job roles and responsibilities. Requires employment in a hospitality setting for a minimum of 250 clock hours. Prerequisite: Junior standing, restricted to FHNV/HRMN students, & 500 hours of documented work-related hospitality experience may be repeated for up to 6 hours of degree credit.

HESC4753 Family Financial Management (Sp, Fa) Economic considerations of the family in a rapidly changing society. Family finance and consumer problems are emphasized. HESC4901 Apparel Studies Pre-Study Tour (Sp) (Even years, Fa) A study of specific regional and international fashion markets for apparel studies in preparation for HESC 4912 APST Study Tour. The course examines the design, production, distribution and retailing of fashion goods from couture fashion to mass markets. Prerequisite: 2.0 minimum GPA, APST majors only. May be repeated for up to 4 hours of degree credit.

HESC4912 Apparel Studies Study Tour (Su) (Even years, Fa) An on-site study of specific regional and international fashion markets for apparel studies. Course further examines the design process as related to children’s clothing fashion goods from couture fashion to mass markets as outlined in HESC 4901. Course includes study trip; length based upon destination. Additional fees required. Pre- or Corequisite: HESC 4901. Prerequisite: 2.0 minimum GPA, APST majors only. May be repeated for up to 8 hours of degree credit.

HESC5003 Apparel Studies in the Global Economy (Even years, Fa) Analysis of economic, social and political aspects of the domestic and international textile and apparel industries. Lecture 3 hours.

HESC5013 Advanced Apparel Design Pattern (Sp) Use of computer aided design technology to perform pattern making techniques as applied to apparel production. Laboratory 5 hours per week. Prerequisite: HESC 3003.

HESC5023 Social, Psychological and Cultural Aspects of Dress (Odd years, Fa) Integration of social, psychological and cultural theories as they apply to appearance and clothing behavior. Lecture 3 hours.

HESC502V Special Problems Research (Sp, Su, Fa) (1-6) Advanced study in areas of special interest. May be repeated for up to 6 hours of degree credit.

HESC5033 Issues and Trends in Textile Studies (Odd years, Fa, Sp) Students study trends in textiles science and recent developments in the textile industry. Lecture 3 hours.

HESC5043 Theories and Practices in Apparel Merchandising (Even years, Sp) Theoretical perspectives, concepts and current practices that influence apparel merchandising. Lecture 3 hours.

HESC5223 Nutrition during the Life Cycle (Fa) Study of normative nutrition emphasizing quantitative needs for nutrients as functions of development for apparel production. Lecture 2 hours per week. Corequisite: HESC 4901. Prerequisite: 2.0 minimum GPA, APST majors only. May be repeated for up to 8 hours of degree credit.

HESC522V Readings in Nutrition (Sp) (1-6) Reading course designed to give the student an introduction to the field of nutrition. Emphasis on basic nutrition, dietary guidelines, food plans, weight control, and relevant current literature. May be repeated for up to 6 hours of degree credit.

HESC5253 Advanced Studies in Childhood (Fa) Advanced studies in childhood and alternative assignments. Limited to hospitality graduate students only. Prerequisite: Restricted to graduate students in HESC, must be 21 years old, completion of alcohol compliance education program.

HESC526V Master’s Thesis (Sp, Su, Fa) (1-6) HESC700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy.

HPRP5853 Research in Health, Human Performance and Recreation (Sp, Su, Fa) Methods and techniques of research in health, human performance and recreation including an analysis of examples of their use and their application to problems of interest to the student.

HPRP560V Workshop (Irregular) (1-6) HPRP6233 Management in HPRP (Irregular) Deals with principles, procedures, relationships, problems, and current practices in the supervision of health education and kinesiology (fitness) programs, including management of facilities, programs, personnel, and processes.

HPRP6333 Measurement in HPRP (Odd years, Fa) Competencies for analysis and application of evaluation and measurement in health education and kinesiology (fitness) programs, including management of facilities, programs, personnel, and processes.

HPRP689V Directed Research (Sp, Su, Fa) (1-6) Laboratory investigations, in basic and applied research.

HPRP699V Seminar (Irregular) (1-3) May be repeated for up to 6 hours of degree credit. Prerequisite: Candidacy.

HPRP700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy.
Course Descriptions

HIED5503 Overview-American Higher Education (Fa) A basic course in the study of higher education open to all students seeking careers in colleges and universities. Serves as an introduction to the field, programs, problems, issues, and trends in higher education.

HIED5503 Student Affairs in Higher Education (Fa) Study of origins, functions, and policies in student personnel services in complete and partial service colleges and universities with emphasis on the student and student development.

HIED5504 Practicum in Higher Education (Sp, Su, Fa) (1-6) Students are assigned to a department or agency within or outside the university for professional experience under the joint supervision of on-site personnel and university faculty. Periodic meetings are scheduled for evaluation, discussion, and examination of techniques.

HIED500V Introduction to the Study of Higher Education (Sp, Su, Fa) A requirement for all new doctoral and specialist students. Familiarization with writing requirements, library search procedures, library resources, and program requirements. Prerequisite: Admission to Higher Education program (Ed.S. & Ed.D.)

HIED500V Independent Study (Sp, Su, Fa) (1-18) Provides students with an opportunity to pursue special study in higher education.

HIED5003 Management Skills for Effective Leadership (Irregular) Development of management skills that enhance leadership includes understanding yourself, managing yourself, team building, personnel selection, group and individual decision-making, problem solving, managing conflict, developing valid performance appraisal systems, conducting performance appraisal interview, and other topics of current interest. Prerequisite: Doctoral students in Higher Education or permission of the instructor.

HIED5093 Leading Change (Irregular) An in-depth examination of leadership, change, and culture in postsecondary education.

HIED5133 Organization Development and Change in Higher Education (Irregular) An examination of the theory and practice of organization development as it relates to planned change in colleges and universities.

HIED5323 Design and Evaluation of College Teaching (Irregular) Theory and practice of effective college teaching. Emphasis is placed on preparation and evaluation of instruction.

HIED5333 Assessing and Enhancing Effectiveness in Higher Education (Sp) The course examines the fundamentals of assessment of learning outcomes and institutional effectiveness and introduces assessment as a tool to inform strategic planning and data-driven decision-making in higher education.

HIED5653 Legal Aspects of Higher Education (Sp) An examination of the legal status of higher education in the United States; the rights and responsibilities of educators and students including fair employment; due process; torts liability and contracts; student rights; landmark court decisions on federal and state legislation having an impact on education.

HIED6263 Financial Management (Sp) Higher education finance and budgeting practices: problems, issues, trends, and policy issues in higher education.

HIED6263 Governance and Policy Making in Higher Education (Odd years, Fa) An analysis of governance and policy making affecting the control of colleges and universities. Attention is given to policy generation, governing board supervision, and the impact of institutional, professional, and regional groups as well as community, state, and federal pressures.

HIED6503 Research Techniques in Higher Education (Irregular) Techniques of research applicable to Higher Education.

HIST1113 Institutions and Ideas of World Civilizations I (Sp) Introduction to the major civilizations of the world in their historical context up to 1500.

HIST1113H Honors Institutions and Ideas of World Civilizations I (Irregular) Study of Western and non-Western civilizations.

HIST1123 Institutions and Ideas of World Civilizations II (Sp) Introduces the major civilizations of the world in their historical context, since 1500.

HIST1223H Honors Institutions and Ideas of World Civilizations II (Irregular) Study of Western and non-Western civilizations.

HIST2003 History of the American People to 1877 (Sp, Su, Fa) A survey of the American experience from pre-colonial times to the late post-Reconstruction period and will include all of the major periods and events in American history.

HIST2013 History of the American People to 1877 (Irregular) Study of Western and non-Western civilizations.

HIST2033 History of the American People to 1877 (Sp, Su, Fa) A survey of the American experience from pre-colonial times to the late post-Reconstruction period and will include all of the major periods and events in American history.

HIST2033H Honors History of the American People to 1877 (Irregular) Survey of the American experience from pre-colonial times to the late post-Reconstruction period and will include all of the major periods and events in American history.

HIST3063 Military History (Irregular) The course examines the fundamental, evolution, and distinctive character of Islam, with a particular focus on the modern period since 1789. Topics include the role of religion, literature, art, architecture, science, and political society. Particular attention given to the development of Islamic doctrines, sectarian movements, and systematic theology. Concludes with a look at Islamic resurgence movements and their impact on modern society.

HIST3083 Women and Christianity (Irregular) From Paul to the mystics of the late medieval church, this course considers women’s religious expression, symbolic action, interaction with holy men, and their relationship with the ecclesiastical hierarchy. Other important questions include women’s institutional subordination opportunities for autonomous action.

HIST3203 Colonial Latin America (Odd years, Fa) An introduction to the social, cultural, political, and economic formation of Latin America, during the period from 1492 to the movements for independence.

HIST3213 Modern Latin America (Even years, Sp) An examination of the various courses of modernization in Latin America, covering popular revolution, urban populism and military dictatorship.

HIST3233 African American History to 1877 (Fa) History of the African American experience in North America emphasizing economic, social, and cultural perspectives. Topics include slave trade, plantation economy, the development of the American institution of slavery, free community formation in North, and the impact of the Civil War and Reconstruction on African Americans. (Same as AAST 3333)

HIST3243 African American History Since 1877 (Sp) The course will study the major social, political, and economical issues relative to the African American experience beginning with the late post-Reconstruction period and will include all of the major periods and events in African American history.

HIST3323 The History of Sub-Saharan African (Sp) Sub-Saharan African history from the 18th century to the present, with emphasis on the impact of colonialism and globalization, Independence, and contemporary issues of the post-colonial period. Examination of the ways Africans experienced change in terms of culture, society, economics, gender, religion, politics, and the arts.

HIST3323 The West of the Imagination (Irregular) The changing image of the American West from the colonial period to the present and how popular impressions have reflected national attitudes and values. Special attention given to the West’s portrayal in folklore, literature, art, films, and television.

HIST3383 Arkansas and the Southwest (Sp, Fa) An examination of the major economic, social, and cultural development of Arkansas from the coming of the Indian to the 20th century, with special emphasis on the Spanish Caribbean from pre-Columbian to modern times. The course examines the institution from Alexander the Great to the present. Special attention will be given to the operation of these factors in the American Revolution, the Napoleonic Wars, the American Civil War, and World War II.

HIST3373 History of the Middle East (Irregular) Survey of the basic principles of Islamic history and politics, and the political organization from Alexander the Great to the present. Special attention will be given to the operation of these factors in the American Revolution, the Napoleonic Wars, the American Civil War, and World War II.

HIST3373 Women and Gender in Latin American History (Odd years, Fa) Examines the role of women in Latin America and the Spanish Caribbean from pre-Columbian to modern times. Topics include women’s roles and expectations, and gender roles and expectations as they confronted legal, political, and social institutions.

HIST3383 Women and Christianity (Irregular) From Paul to the mystics of the late medieval church, this course considers women’s religious expression, symbolic action, interaction with holy men, and their relationship with the ecclesiastical hierarchy. Other important questions include women’s institutional subordination opportunities for autonomous action.

HIST3393 Modern Imperialism (Odd years, Fa) Examines the causes, nature, and consequences of modern imperialism. The histories of five different empires are studied and compared to give an overview of the phenomenon.

HIST3453 Modern Terrorism (Irregular) Examines the historical foundations and course of modern terrorism, from the French Revolution to the present. Special attention is given to the Irish Republican Army, Baader Meinhoff Gang (Red Army Faction), the American militarist movement, and al-Qaeda.

HIST3453 Modern and Imperialism (Irregular) History of 19th-20th Century Palestine, Zionism and the foundation of modern Israel, and the Palestine-Israel conflict in local and regional perspectives.

HIST3453 The History of China to 1644 (Fa) An interdisciplinary introduction to Chinese history and culture, beginning with the archaeological record and extending over the dynastic period and into early 17th century. Covers the major events, philo-
HIST4583 Arkansas in the Nation (Sp) An examination of the history and development of the political, social, and economic development of the antebellum South.

HIST4593 The History of African Americans and Social Justice (Even years, Fa) Examines the history of African Americans from the civil rights movement to the present, focusing on the political, social, and cultural transformation of African Americans in the United States.

HIST4603 African American Biographies (Irregular) Provides an introduction to the study of African American history and biographies, focusing on the lives and achievements of notable African Americans.

HIST4613 Latin American History (Odd years, Sp) Explores the history of Latin America from the pre-Columbian era to the present, with a focus on political, social, and cultural developments.

HIST4623 Latin American Social and Political History (Even years, Sp) Examines the social and political developments in Latin America, focusing on issues such as colonialism, slavery, and the rise of nationalism.

HIST4633 Middle Eastern History (Odd years, Sp) Provides an introduction to the history of the Middle East, focusing on political, social, and cultural developments.

HIST4643 Modern Europe (Odd years, Sp) Explores the political, social, and economic developments in Europe from the 19th to the 20th centuries.

HIST4653 The History of Women in the United States (Even years, Sp) Explores the history of women in the United States, focusing on issues such as the suffrage movement, the civil rights movement, and the feminist movement.

HIST4663 American Foreign Policy (Even years, Sp) Explores the history of American foreign policy, focusing on issues such as the Cold War, the Vietnam War, and the War on Terror.

HIST4673 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4683 Early Modern Europe, 1600-1800 (Odd years, Sp) Explores the political, social, and cultural developments in Europe from the early modern period to the Age of Enlightenment.

HIST4693 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4703 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4713 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4723 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4733 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4743 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4753 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4763 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4773 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4783 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4793 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4803 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4813 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4823 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4833 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4843 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4853 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4863 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4873 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4883 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4893 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4903 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4913 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4923 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4933 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4943 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4953 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4963 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4973 The History of the United States (Odd years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.

HIST4983 The History of the United States (Even years, Sp) Provides an overview of the history of the United States, focusing on significant events and developments.
collectively understand the meanings of their labor and to the ways that notions of class, gender, ethnicity, and race inform these processes.  

HIST463 Colonial America 1600-1763 (Irregular) History of colonial America from 1600 to the end of the Seven Years War emphasizing economic, social, and cultural perspectives. Topics include the early years of Her, Spanish, English, Dutch, and Russian interactions in North America and the larger Atlantic World.  

HIST4623 Revolutionarv America, 1763 to 1879 (Irregular) History of revolutionary America emphasizing economic, social, and cultural perspectives. Topics include historical interpretations of the causes of the war, the impact of war on African Americans, women, loyalists, elite, and poor Americans. The course also examines the formation of the new national government.  

HIST4633 Heian Japan (794-1192) (Odd years, Sp) A study of courtly culture and the religious world of Heian Japan.  

HIST4633H Honors Heian Japan (794-1192) (Odd years, Sp) A study of courtly culture and the religious world of Heian Japan.  

HIST4643 Early American Republic, 1789-1828 (Irregular) History of the early United States emphasizing social and cultural perspectives. Topics addressed will include westward expansion, slavery, religion, and economic change.  

HIST4653 Antebellum America, 1828-1850 (Irregular) Histo-
ry of antebellum America emphasizing social and cultural perspectives. Topics addressed will include slavery, religion, gender, the market economy, regionalism, and political developments.  

HIST4663 Rebellion to Reconstruction, 1850-1877 (Irregu-
lar) A critical introduction to the most important sources and major themes, both textual and archeological, for the study of early China.  

HIST4853H Honors Early Chinese Empires: Mythology, Archeology, and Historiography (Sp) A critical introduction to the most important sources and major themes, both textual and archeological, for the study of early China.  

HIST4843H Health and Disease: 1500 to the present (Irregu-
lar) Explores the emergence of epidemics against the back-
drop of the nation state and anxieties over women, the lower classes, and other marginalized groups. The rise of modern medicine, health and public health; the impact of medi-
cine, the biases of scientific inquiry, and the tensions among paternalism, liberty, and prejudice.  

HIST4893 Senior Capstone Seminar (Fa) Required for all history majors. Current theories of interpreting and evaluating the past. Emphasizes skills of analysis, synthesis, and integration. Students produce a primary source-based research paper. A grade of a B or better will satisfy the Fulbright writing requirement. Prereq:

HIST4873 Germany since 1945 (Even years, Fa) Examines the history of Germany since the end of the Second World War including political division and economic recovery, dissident movements in East Germany and alternative cultures in West Germany, reunification in 1990, and the legacy of Nazism and the Holocaust.  

HIST4883 Health and Disease: 1500 to the present (Irregu-
lar) Explores the emergence of epidemics against the back-
drop of the nation state and anxieties over women, the lower classes, and other marginalized groups. The rise of modern medicine, health and public health; the impact of medi-
cine, the biases of scientific inquiry, and the tensions among paternalism, liberty, and prejudice.  

HIST4893 Senior Capstone Seminar (Fa) Required for all history majors. Current theories of interpreting and evaluating the past. Emphasizes skills of analysis, synthesis, and integration. Students produce a primary source-based research paper. A grade of a B or better will satisfy the Fulbright writing requirement. Prereq:

HIST4873 Germany since 1945 (Even years, Fa) Examines the history of Germany since the end of the Second World War including political division and economic recovery, dissident movements in East Germany and alternative cultures in West Germany, reunification in 1990, and the legacy of Nazism and the Holocaust.  

HIST4883 Health and Disease: 1500 to the present (Irregu-
lar) Explores the emergence of epidemics against the back-
drop of the nation state and anxieties over women, the lower classes, and other marginalized groups. The rise of modern medicine, health and public health; the impact of medi-
cine, the biases of scientific inquiry, and the tensions among paternalism, liberty, and prejudice.  

HIST4893 Senior Capstone Seminar (Fa) Required for all history majors. Current theories of interpreting and evaluating the past. Emphasizes skills of analysis, synthesis, and integration. Students produce a primary source-based research paper. A grade of a B or better will satisfy the Fulbright writing requirement. Prereq:

HIST508V Senior Thesis (Irregular) (1-6)  

HIST5023 Historical Methods (Fa) Practical introduction to historical research and writing. Consists of lecture, library reading, and class criticism of research papers. Prerequisite:  

HIST5043 Historiography (Irregular) Survey of the history of historical writing and a study of the important schools and his-
torical interpretation. Prerequisite: Graduate standing.  

HIST5053 Reading Seminar in Asian History (Irregular) Prereq:

HIST507V Readings in American History (Sp, Su, Fa) (1-6) Prereq:

HIST509V Research Problems in American History (Sp, Su, Fa) (1-6) Prereq: Graduate standing.  

HIST511V Research Problems in Latin American History (Irregu-
lar) Research projects in selected fields of Latin American history such as the Civil War, the Age of Jackson, etc. Prerequisite: Graduate standing. May be repeated for up to 3 hours of de-

credit.  

HIST5123 Research Seminar in European History (Irregu-
lar) Historiographical and bibliographical study of special peri-
dods in European history, such as the Roman Empire, the late Middle Ages, the French Revolution, etc. Prerequisite: Gradu-
ate standing. May be repeated for up to 3 hours of de-
credit.  

HIST513 Research Seminar in British History (Irregular) Research projects in selected fields of British history. May be repeated for up to 6 hours of de-
credit.  

HIST5143 Research Seminar in European History (Irregu-
lar) Research projects in selected fields of European history, such as the French Revolution, humanism, etc. Prerequisite:  

HIST5153 Research Seminar in British History (Irregular) Research projects in selected fields of British history. May be repeated for up to 6 hours of de-
credit.  

HIST517V Readings in Asian History (Irregular) (1-6) Pre-

HIST518V Research Problems in Asian History (Irregular) (1-18) Prerequisite: Graduate standing.  

HIST5213 Research Seminar in Middle Eastern History (Irregu-
lar) Historiographical and bibliographical study of special periods of Middle Eastern history. Prerequisite: Graduate stand-
ing. May be repeated for up to 3 hours of de-
credit.  

HIST5222 Readings in Latin America (Irregular) (1-6)  

HIST5233 Research Seminar in Eastern History (Irregular) (1-6)  

HIST524V Readings in African History (Irregular) (1-6)  

HIST525V Research Problems in African History (Irregu-
lar) (1-6)  

HIST526V Readings in Middle Eastern History (Irregular) (1-6)  

HIST527V Readings in Medieval History (Irregular) (1-6) Prereq:

HIST528V Research Problems in Middle Eastern History (Irregular) (1-6)  

HIST529V Research Problems in Medieval History (Irregu-
lar) (1-6) Prerequisite: Graduate standing. May be repeated for up to 6 hours of de-
credit.  

HIST5313 Reading Seminar in Latin American History (Irregu-
lar) Historiographical and bibliographical study of special areas in Latin American history. Prerequisite: Graduate stand-
ing. May be repeated for up to 6 hours of de-
credit.  

HIST5323 Research Seminar in Latin American History (Irregu-
lar) A research seminar for the production of a major research project in Latin American history. Prerequisite: Gradu-
ate standing. May be repeated for up to 6 hours of de-
credit.  

HIST533V Readings in Ancient History (Irregular) (1-6) Prereq:

HIST534V Readings in Ancient History (Irregular) (1-6) Prereq:

HIST536V Readings in Ancient History (Irregular) (1-6) Prereq:

HIST539V Readings in Ancient History (Irregular) (1-6) Prereq:

HIST540V Readings in Ancient History (Irregular) (1-6) Prereq:
HONORS EDUCATION (HND)  

HNEO3001H Honors Education Thesis Tutorial (Sp, Su, Fa)  
Designed to provide the foundation for the Honors Thesis. Students and faculty tutors will work on an "one-on-one" exploring a specific topic which has been agreed upon by the student and the professor. Prerequisite: Honors candidacy. May be repeated for up to 8 hours of credit.

HNEO400V Honors Education Thesis Project (Sp, Su, Fa)  
(3) Prerequisite: Honors candidacy and HNEO 3001H.

Horticulture (HORT)  

HORT1103 Plants in the Home Environment (Fa)  
A course describing the aesthetic, nutritional and health value, and other importance of plants and gardening. The course will cover the use and importance of plants and gardening through the ages, study significant gardens to humankind, and introduce students to using plants to their benefit. The use of color, texture, aroma and flavor in the home and landscape will be presented. Basic horticulture, plant care and use will be discussed and practiced.

HORT2003 Principles of Horticulture (Sp, Fa)  
A course introducing students to the biological and technologies underlying the propagation, production, handling and use of horticultural crops, turf and landscape plants. Students will be introduced to the various disciplines and commodities of horticulture. The use of plants for the benefit of human kind because of their aesthetic, nutritional value will be explained. Previous instruction in Plant Science, Plant Biology, or general Botany is strongly encouraged. Corequisite: Lab component.

HORT2004 Principles of Turfgrass Management (Fa)  
An introductory course in turfgrass management emphasizing turfgrass growth, adaptation, and management. Methods for establishment, fertilization, mowing, cultivation, irrigation, and pest management are presented, and their impact on cultural practices involved in landscape installation and construction. Topics covered include sequencing construction activities, protecting existing trees, landscape soils, selecting plants, planting and transplanting plant materials, wood construction, cement and masonry construction, and low-voltage lighting. Lecture 3 hours per week. Preparatory training in agribusiness or business is recommended. Prerequisite: HORT 2003 and HORT 3103.

HORT2033 Professional Landscape Installation and Construction (Even years, Fa)  
Principles and practices involved in landscape installation and construction. Topics covered include sequencing construction activities, protecting existing trees, landscape soils, selecting plants, planting and transplanting plant materials, wood construction, cement and masonry construction, and low-voltage lighting. Lecture 3 hours per week. Preparatory training in agribusiness or business is recommended. Prerequisite: HORT 2003 and HORT 3103.

HORT2043 Professional Landscape Management (Odd years, Fa)  
Principles and practices of landscape management and maintenance. Topics include low maintenance and sea- sonal care of deciduous trees and shrubs, turf care, pest management, weeds, soil and fertilizer management, weed and fertilizer management, pesticide use, and other maintenance activities. Basic elements of marketing, specifications and contracts, estimating, personnel management, and equipment selection. Lab and field components will be introduced. Preparatory training in agribusiness or business is suggested. Prerequisite: HORT 2003 and HORT 3103.

HORT3123 International Horticulture (Sp)  
Considerable globalization of agriculture has occurred over the past several decades. This course provides a base of knowledge of the international horticulture industry focusing on principles and practices of development and trade of horticultural crops.

HORT3203 Sustainable Landscape Practices (Sp)  
New methods of landscape management are required to restore or protect the ecological services provided by developed landscapes. This course is focused on methods for sustainable land management. Included as part of the curriculum is a survey of sustainable management as it applies to site resources, including water, nutrients, energy and biodiversity. Retrofitting existing development, organic lawn, tree, and shrub care, succession-based landscape development, material selection, and best available equipment will be covered in depth. Prerequisite: HORT 2003.

HORT3303 Vegetable Crops (Irregular)  
General course in vegetable crops with attention to the principles underlying methods of production and handling related to yields and quality of the products. Lecture 2 hours, laboratory 2 hours per week. Prerequisite: HORT 2003 and CSES 2003.

HORT3403 Turfgrass Management (Even years, Sp)  

HORT3503 Sustainable and Organic Horticulture (Even years, Fa)  
This course will provide a base of knowledge of the principles and practices of sustainable and organic, and alternative horticulture management systems. The class will review and evaluate topics including soil biological processes (compost, humus and fertility), pest management, and the management of forest and farm systems. After this foundation is studied, the class will study applications of sustainable agriculture principles to production systems such as greenhouse vegetable production, ornamental production, fruit production, and landscape and turf management.

HORT3803 Horticulture Physiology (Sp)  
This course provides students with a background into the physiological processes of plants used in the landscape. Topics covered include how the processes relate to horticultural crop production practices. Among the topics covered are photosynthesis, respiration, water relations and morphogenesis. Prerequisite: HORT 2003 and CHEM 1073.

HORT3901 Horticultural Career Development (Sp)  
A course which presents concepts necessary for developing a career and becoming a professional in horticulture industries or businesses. Concepts of goal setting, effective communication, interpersonal skills, behaviors and performance, portfolio and resume, development and job hunting skills will be presented.

HORT400V Special Topics (Sp, Su, Fa)  
(1-6) Prerequisite: Lab component. May be repeated for up to 6 hours of degree credit.

HORT401V Special Topics in Horticulture, Turf or Landscape (Irregular) (1-6) Prerequisite: Lab component. May be repeated for up to 6 hours of degree credit.

HORT4503 Sustainable Nursery Production (Sp)  
This course will provide a base of knowledge of the principles and practices of sustainable and organic, and alternative horticulture management systems. The class will review and evaluate topics including soil biological processes (compost, humus and fertility), pest management, and the management of forest and farm systems. After this foundation is studied, the class will study applications of sustainable agriculture principles to production systems such as greenhouse vegetable production, ornamental production, fruit production, and landscape and turf management.

HORT4801L Greenhouse Crops Production Laboratory (Even years, Sp)  
Lecture 2 hours, laboratory 2 hours per week. Prerequisite: HORT 2003 and CSES 2003.

HORT4932 Turf Best Management Practices (Odd years, Sp)  
A research seminar for the production of a major research project in medival history. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

HIST4513 Reading Seminar in African History (Irregular)  
A seminar for the production of a major research project in selected special areas in ancient history. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

HIST4523 Research Seminar in African History (Irregular)  
A seminar for the production of a major research project in selected special areas in ancient history. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

HIST570V Special Topics (Irregular)  
(1-6) Prerequisite: Graduate standing. May be repeated for up to 9 hours of degree credit.

HIST600V Master's Thesis (Sp, Su, Fa)  
(1-6) Prerequisite: Graduate standing.

HIST700V Doctoral Dissertation (Sp, Su, Fa)  
(1-18) Prerequisite: Honors candidacy. May be repeated for up to 18 hours of degree credit.

HIST3503 Sustainable and Organic Horticulture (Even years, Fa)  
This course will provide a base of knowledge of the principles and practices of sustainable and organic, and alternative horticulture management systems. The class will review and evaluate topics including soil biological processes (compost, humus and fertility), pest management, and the management of forest and farm systems. After this foundation is studied, the class will study applications of sustainable agriculture principles to production systems such as greenhouse vegetable production, ornamental production, fruit production, and landscape and turf management.

HIST3803 Horticulture Physiology (Sp)  
This course provides students with a background into the physiological processes of plants used in the landscape. Topics covered include how the processes relate to horticultural crop production practices. Among the topics covered are photosynthesis, respiration, water relations and morphogenesis. Prerequisite: HORT 2003 and CHEM 1073.

HIST3901 Horticultural Career Development (Sp)  
A course which presents concepts necessary for developing a career and becoming a professional in horticulture industries or businesses. Concepts of goal setting, effective communication, interpersonal skills, behaviors and performance, portfolio and resume, development and job hunting skills will be presented.

HIST400V Special Topics (Sp, Su, Fa)  
(1-6) Original investigation of problems in horticulture. Corequisite: Lab component. Prerequisite: HORT 2003 and CHEM 1073.

HIST4901L Greenhouse Crops Production Laboratory (Even years, Sp)  
Lecture 2 hours, laboratory 2 hours per week. Prerequisite: HORT 2003 and CSES 2003.

HIST4903L Master's Thesis (Sp, Su, Fa)  
(1-6) Prerequisite: Lab component. May be repeated for up to 6 hours of degree credit.

HIST4932 Turf Best Management Practices (Odd years, Sp)  
A research seminar for the production of a major research project in medival history. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.
Application of genetic principles to the improvement of crop plants. Presentation of conventional plant breeding methods and principles as polygenic, interaction, hybridization and induced mutation. Lecture 3 hours per week. Prerequisite: BIOL 2323 and BIOL 2321L (or ANSC 3123 and CSES 4103).

HORT2013 Plant Growth and Development (Fa) This course will focus on environmental and developmental processes of plant growth and development. A student completing this course should have an understanding of the developmental processes of plant growth and how environmental factors interact to affect and control plant growth and development.

HORT5203 Temperature Stress Physiology (Sp) This course will teach students how to apply biological, chemical and physical methods to control levels of heat and cold stresses imposed by temperature extremes and how they change to increase resistance. Student will apply these principles to better understand plant responses to other environmental challenges, including both biotic and abiotic stresses.

HORT600V Master’s Thesis (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing.

HORT602V Special Topics in Horticulture (Irregular) (1-3) Discussion and advanced studies on selected topics in genetics, plant breeding, physiology and culture of horticultural crops. Prerequisite: Graduate standing. May be repeated for credit.

HORT6033 Genetic Techniques in Plant Breeding (Irregu- lar) In-depth study of genetic improvement and techniques. Covers both current and classical literature. Topics to be discussed: haploidy, genetic control of pairing, somatic instability, tissue culture, and male sterility. Lecture discussion 3 hours per week. Prerequisite: BIOL 2323 and BIOL 2321L (or ANSC 3123 and CSES 4103 or equivalent).

HRDV200V Work Experience (Irregular) (1-30) Credit by advanced standing for job knowledge as measured by advisor approved National Occupational Competency Test- ing Institute (NOCTI) assessments. May be repeated for up to 30 hours of degree credit.

HRDV3113 Skills/Strategies in Human Resource Develop- ment (Sp) The acquisition of professional skills and strategies associated with creating and maintaining adult learning environments. Includes a regular class workshop situation where skills are practiced and encouraged and a work-based situation where skills are tried and implemented as well as assessed. Pre- or Corequisite: HRDV 3213 and HRDV 4113.

HRDV3123 Theory and Principles of Needs Assessment and Evaluation in Human Resource Development (Sp, Fa) Addresses the acquisition and application of knowledge associated with needs assessment and evaluation of human resources with emphasis on workplace situations. Pre- or Corequisite: HRDV 3133 and HRDV 4113.

HRDV3133 Theories and Principles of Communication in Human Resource Development (Sp) This course introduces communication principles and practices in HRD. Coursework emphasizes identifying and developing communication skills that apply to roles, responsibilities, and strategies while exploring how individuals communicate in organizational systems. Both theoretical and practical applications will be included. Pre- or Corequisite: COMM 1313 or COMM 2303 and HRDV 3213 and HRDV 4113.

HRDV3213 Introduction to Human Resource Development (Fa) Presents the theory and processes associated with human resource development (HRD) used to design and measure interventions in the areas of organization development, personnel training and development, and career development. Students will analyze organizations and study global implications of HRD. Also surveys topics in human resource management (HRM) that distinguish HRM from HRD. Pre- or Corequisite: PSYC 2003. Prerequisite: Departmental approval.

HRDV3403 Employment Law in Human Resource De- velopment (Sp) In an actual work setting, the student will observe, participate and apply skills regarding personnel issues. Prerequisite: HRDV 3213 and HRDV 4113.

HRDV4213 Strategies in Professional Development in HRD (Sp, Fa) Students are encouraged to examine their own learning processes and professional development in terms of the theories and principles of how adults learn. Methods and strategies for self-development and change are discussed. Self-directed lifelong learning strategies that ensure continued growth for professional adult learners/human resource development practitioners will be discussed. Pre- or Corequisite: CHP 1103 or TEED 1603 or CHP 1002 (or 3 credit hours of a similar wellness, fitness or safety course) and HRDV 3213 and HRDV 4113.

HRDV4233 Theories and Principles of Leadership in Hu- man Resource Development (Sp, Fa) This course provides an introduction to leadership principles and practices in the workplace. Focus is on ethical awareness in the student's profession, or who plan to pursue a career in HRD. The em- phasis is on identifying/developing HRD leadership skills and exploring various functions/attributes of leadership and their impact on adult learning principles and their applications will be included. Pre- or Corequisite: HRDV 3213 and HRDV 4113.

HRDV450V Experiential Learning (Sp, Fa) (1-30) This course is limited to persons qualifying for experiential credit to be applied to the Human Resource Development assessment only. Credit is awarded for documented experiential or occupational learning based on a standardized format as suggested by the Council for the Advancement of Experiential Learning (CAE). Any Occupational training or professional certifications may also be earned using the American Council on Education (ACE) guidelines. Prerequi- site: HRDV 3503. May be repeated for up to 30 hours of de- gree credit.

HRDV4603 Applied HRD in Practice (Sp, Su) The purpose of this course is to apply the theories and best practices studied in HRDV 3213, Introduction to Human Resource Develop- ment (HRD). The student will observe, participate and apply strategies of “good training”. Completing this course satisfies one part of the General Assessment of Student Academic Achievement in the HRDV Degree Program. Prerequisite: HRDV 3213. May be repeated for up to 6 hours of degree credit.

HRDV4613 Applied Theory and Principles of Adult Educa- tion in HRD (Su) In an actual business/industrial setting, the student will observe, participate and apply skills regarding adult learning principles by encouraging self-directed learning, analyzing, and synthesizing elements related to developing, ar- ticulating, and implementing an organizational vision, mission, and strategic plan. The course focuses students on exploring their own organization's strategic development plan. Completing this course satisfies one part of the General Assessment of Student Academic Achievement in the HRDV Degree Program. Prerequisite: HRDV 4213.

HRDV4623 Human Resource Development (HRD) In an actual work setting, the student will observe, participate and apply skills regarding adult learning principles by encouraging self-directed learning, analyzing, and synthesizing elements related to developing, articulating, and implementing an organizational vision, mission, and strategic plan. The course focuses students on exploring their own organization's strategic development plan. Completing this course satisfies one part of the General Assessment of Student Academic Achievement in the HRDV Degree Program. Prerequisite: HRDV 4213.

HRDV4663 Applied Theories and Principles of HRD Lead- ership in HRD Practice (Sp, Su) This course is designed to guide students through an in depth process of identifying, ana- lyzing, and synthesizing elements related to developing, ar- ticulating, and implementing an organizational vision, mission, and strategic plan. The course focuses students on exploring their own organization's strategic development plan. Completing this course satisfies one part of the General Assessment of Student Academic Achievement in the HRDV Degree Program. Prerequisite: HRDV 4213.

HRDV4683 Applied Strategies of Professional Development in HRD Practice (Irregular) (1-3) This course is designed to enhance the student's ability to identify personal tenden- cies affecting team performance, promote the application of adult learning principles by encouraging self-directed learning, analyzing, and synthesizing elements related to developing, articulating, and implementing an organizational vision, mission, and strategic plan. The course focuses students on exploring their own organization's strategic development plan. Completing this course satisfies one part of the General Assessment of Student Academic Achievement in the HRDV Degree Program. Prerequisite: HRDV 4213.

HRDV4683 Applied Employment Law in HRD Practice (Ir- regular) Students in this course apply theories and prin- ciples from the prerequisite HRDV 3403 course to identify and solve Employment Law compliance issues commonly faced by Human Resource Development professionals. Prerequisite: HRDV 3403.

HRDV4693 Applied Strategies in HRD Practice (Su) In an actual business/industrial setting, the student will study, observe, participate and apply strategies of "good training". The focus is on the identification, evaluation, and synthesis of planning and conducting training in the workplace. Completing this course satisfies one part of the Specific Assessment of Student Academic Achievement in the HRDV Degree Pro- gram. Satisfying this course satisfies one part of the Specific Assessment of Student Academic Achievement in the HRDV Degree Program. Prerequisite: HRDV 3113.

HRDW05113 Foundations of Human Resource & Workforce Development (HRWD) This advanced level course is intended for career development professionals and/ or subject-matter experts interested in improving their career development skills within a structured or unstructured learning environment. The emphasis is on gaining career development techniques and planning formal and informal career development strategies for the individual or the organization.

HRWD4123 Career Transitions (Fa) This advanced level course is intended for career development professionals and/ or subject-matter experts interested in improving their career development skills within a structured or unstructured learning environment. The emphasis is on gaining career development techniques and planning formal and informal career development strategies for the individual or the organization.
HRWD700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Pre-require: Candidacy.

Humanities (HUMN)

HUMN1114H Honors Roots of Culture to 500 C.E. (Fa) This course constitutes the first segment of a four-semester interdisciplinary study of the Egyptian Book of the Dead, the Torah, the Roman Colsseum, Hinduism, and Confucianism. Open to first-year Honors students by invitation only. Corequisite: Drill component.

HUMN1124H Honors Equilibrium of Cultures 500-1600 (Sp) This course constitutes the second segment of a four-semester sequence focusing on world cultures. Semester 2 may include the interdisciplinary study of Islam, early Byzantium, Gothic architecture, Heian Japan, and the ancient Maya. Open to first-year Honors students by invitation only. Corequisite: Drill component.

HUMN2003 Introduction to Gender Studies (Sp) This course explores cultural constructions of gender and sexuality using a variety of media, including literature, film, and architectural design. It focuses on facilitating individual and group learning to affect organizational change.

HRWD5323 International HRWD (Fa) Exploration of how globalization and culture affect the workplace and the human resource development profession. Differences in evidence on HRD and HRD practiced in a single country. Impact of culture on every aspect of HRD implementation and practice. Examination of HRD practices in different regions of the world.

HRWD5613H Honors Research Experience in the Workplace (Sp) Facilitation of learning and performance improvement in the workplace. Application of instructional methods, formal and informal learning strategies, coaching, team building, and formal and informal on-the-job learning tactics. Focus on facilitating individual and group learning to affect organizational change.

HRWD571V Independent Study (Irregular) (1-9) May be repeated up to 3 hours of degree credit.

HRWD572V Workshop (Irregular) (1-3) Prerequisite: Advanced graduate standing. May be repeated for up to 3 hours of degree credit.

HRWD584V Field Experience (Irregular) (1-18) This course is designed for the student to attain paid or unpaid experiential development. May be repeated for up to 18 hours of degree credit.

HRWD584V Project and Program Evaluation (Even years) (Sp, Su) This course is a doctoral level course designed as an introduction to project and program evaluation in human resource and workforce development. Emphasis is on (a) project design and development, (b) project evaluation and improvement, and (c) the integration of evaluation with strategic planning and performance improvement.

HRWD6233 Qualitative Research Design and Analysis (Even years) (Sp) This course is designed to introduce HRD students to qualitative research design, data collection and data analysis. Course content includes data collection through interviews, field observation, records research, ethical issues associated with research in one's discipline, and current trends. Pre- or Corequisite: 27 MED credit hours completed.

HRWD671V Independent Study (Irregular) (1-9) May be repeated up to 3 hours of degree credit.

HRWD672V Workshop (Irregular) (1-3) Prerequisite: Advanced graduate standing. May be repeated for up to 3 hours of degree credit.

HRWD6933H Honors Research Experience in the Workplace (Irregular) (1-18) This course is designed for the student to attain paid or unpaid experiential development. May be repeated for up to 18 hours of degree credit.

HRWD6933H Project and Program Evaluation (Even years) (Sp, Su) This course is a doctoral level course designed as an introduction to project and program evaluation in human resource and workforce development. Emphasis is on (a) project design and development, (b) project evaluation and improvement, and (c) the integration of evaluation with strategic planning and performance improvement.

HRWD6933 Qualitative Research Design and Analysis (Odd years) (Sp) This course is designed to introduce HRD students to qualitative research design, data collection and data analysis. Course content includes data collection through interviews, field observation, records research, ethical issues associated with research in one's discipline, and current trends. Pre- or Corequisite: 27 MED credit hours completed.

HRWD700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Pre-require: Candidacy.

IDES1034 Studio 1: Design Exploration I (Fa) Introduction to design language through two- and three-dimensional projects. Corequisite: IDES 1034.

IDES1044 Studio 2: Design Exploration II (Sp) Ideation, sketching, visual expression, and spatial manipulation. Corequisite: IDES 1034.

IDES2085 Studio 3: Basic Space Planning and Communication (Fa) An introduction to interior space articulation and the creation of small scale spaces. Components of various presentation methods and formats. Overnight travel requires additional fees. Prerequisite: IDES 1044 and IDES 2853.

IDES2815 Studio 4: Intermediate Space Planning and Design (Sp) Studio activities with emphasis on conceptualization and the integration of design and the computer application. Overnight travel required. Corequisite: IDES 3843. Prerequisite: IDES 2805 and IDES 2823 and WCOB 1120.

IDES3823 Interior Design Materials and Resources (Irregular) A study of materials and resources used in designing residential and contract interiors. CSI format utilized. Lecture 3 hours per week.. Prerequisite: IDES 1044 and IDES 2853.

IDES2833 Honors Interior Design Materials and Resources (Irregular) A study of materials and resources used in designing residential and contract interiors. CSI format utilized. Lecture 3 hours per week. Corequisite: IDES 2805. Prerequisite: Junior standing in the Interior Design Program.

IDES2853 Introduction to Textiles for Interior Designers (Sp) Introduction to textile properties as they apply to interior applications, emphasis on interior serviceability and codes.

IDES2883 History of Interiors (Irregular) Study of historic interior furnishing and furniture from antiquity to the present day. Identification of interior styles and furniture of these eras is emphasized.

IDES2893H Honors History of Interiors (Irregular) Study of historic interior furnishing and furniture from antiquity to the present day. Identification of interior styles and furniture of these eras is emphasized.

IDES3805 Studio 5: Design and Construction (Fa) Emphasis on the professional and commercial building system design and contract documents. Continued development of presentation skills including hand and computer-based techniques. Prerequisite: IDES 2815 and IDES 3843 and a satisfactory portfolio review.

IDES3815 Studio 6: Large Scale Commercial Interiors (Sp) Advanced studio problems involving larger-scale interior spaces for public use. Overhead field trip requires additional fees. Corequisite: IDES 4813 and IDE4823. Prerequisite: Junior standing in the Interior Design Program.

IDES3833 Building Systems (Fa) A survey course of building systems that addresses the design implications of heating/air conditioning/ventilation, plumbing, power, data/voice/ and telecommunications, fire protection, architectural systems on building interiors. Performance characteristics and sustainable technologies will be addressed. This course will meet 4 times per semester on the scheduled day and time in the designated schedule of classes. Schedule TBD by the instructor at the start of the semester. Corequisite: IDES 3805. Prerequisite: IDES 2815.

IDES3833H Honors Building Systems (Fa) A survey course of building systems that addresses the design implications of heating/air conditioning/ventilation, plumbing, power, data/voice/ and telecommunications, fire protection, architectural systems on building interiors. Performance characteristics and sustainable technologies will be addressed. This course will meet 4 times per semester on the scheduled day and time in the designated schedule of classes. Schedule TBD by the instructor at the start of the semester. Corequisite: IDES 3805. Prerequisite: IDES 2815.

IDES3841 Professional Development (Fa) Development of portfolio and related materials allowing design students to present themselves successfully as candidates for employment or for graduate school. Prerequisite: Junior standing in the Interior Design Program. May be repeated for up to 3 hours of degree credit.

IDES3843 Lighting and Related Building Systems (Irregular) Exploration of interior design applications of lighting, electrical, and other building support systems. Prerequisite: IDES 2805.

IDES3843H Honors Lighting and Related Building Systems (Irregular) Exploration of interior design applications of lighting, electrical, and other building support systems. Prerequisite: IDES 2805.

IDES465V Special Topics (Irregular) (1-6) A focused study of
specialized topics in interior design. May be repeated for up to 6 hours of degree credit.

**INEG2413** Comprehensive Design Process I (Fa)
Proposal development for interior design studio problems. Emphasis on research and programming as they relate to comprehensive design solutions. Personal travel required for research of two specific project type. Prerequisite: IDES 3815 and IDES 4823.

**INEG4811** Internship for Interior Design (Su)
Summer supervised work experience and observation of operations/management procedures in approved design, government or service business. Prerequisite: IDES 3815 and IDES 4823.

**INEG4813** Human Factors in Interior Design (Sp)
Emphasis is given to human behavior as applied to interior design. Types of interior spaces, environmental effects on behavior, ergonomic design, interior design needs of special groups, and human factors programs are studied. Lecture 3 hours per week. Corequisite: IDES 3815. Completion of any two of the following: ANTH 1023, SOCI 2013, PSYC 2003, HESC 1403 or GEOG 1123.

**INEG4813H** Honors Human Factors in Interior Design (Sp)
Emphasis is given to human behavior as applied to interior design. Types of interior spaces, environmental effects on behav-

**INEG2403** Engineering Economic Analysis (Sp, Fa)
required. Corequisite: Drill component. Emphasis is given to the economic aspects of engineering, including current economic aspects of engineering, including current economic problems and the treatment of estimates when evaluating al-
terative courses of action. Methods of selection and replace-
manship and programming, construction, and human factors. Prerequisite: IDES 4805.

**INEG4823** Professional Practice for Interior Design (Sp)
General procedures for operating and maintaining an interior design business. Business documentation, communication and computer application skills, professional responsibilities and ethics. Lecture 3 hours per week. Prerequisite: IDES 3805.

**INEG4823H** Honors Professional Practice for Interior De-
Sign (Sp) General procedures for operating and maintaining an interior design business. Business documentation, commu-
nication and computer application skills, professional responsibil-
ities and ethics. Lecture 3 hours per week. Prerequisite: IDES 3805.

**INEG4825** Design Tours (Irregular) (1-3) Domestic and international study tours of a variety of design locations that contribute to the body of knowledge. Prerequisite: IDES 1044.

**INEG2102** Introduction to Industrial Engineering (Fa)
Survey of traditional industrial engineering problems with em-
phasis on computer-based solution techniques. Introduction to the field of Industrial Engineering. Corequisite: Lab component.

**INEG2313** Applied Probability and Statistics for Engineers I (Sp, Fa) Applications to engineering problems of probability theory, descriptive statistics, single-population point and interval estimation, sample size determination, hypothesis testing, goodness-of-fit testing, and contingency table testing. Corequisite: Drill component. Prerequisite: MATH 2584.

**INEG2313H** Honors Applied Probability and Statistics for Engineers I (Sp, Fa) Applications to engineering problems of probability theory, descriptive statistics, single-population point and interval estimation, single-population hypothesis testing, goodness-of-fit testing, and contingency table testing. Corequisite: Drill component. Prerequisite: MATH 2584.

**INEG2333** Applied Probability and Statistics for Engineers II (Sp, Fa) Applications to engineering problems of two-popula-
tion point and interval estimation, two-population hypothesis testing, linear regression, correlation, design of experiments, analysis of variance, and nonparametric statistics. Introduction to statistical quality control. Prerequisite: INEG 2313.

**INEG2403** Industrial Cost Analysis (Sp)
Use of accounting information for planning and control with emphasis on the economic aspects of engineering, introduction to general accounting procedures; principles of cost accounting and other aspects of production costs; budgeting, depreciation, taxes, distribution of profits, securities, sources of corporate capital, interpretation of financial statements and other related topics. Laboratory required. Corequisite: Lab component.

**INEG2413** Engineering Economic Analysis (Sp, Fa) Economic aspects of engineering, including current economic problems and the treatment of estimates when evaluating alter-

**INEG4223H** Honors Occupational Safety and Health Stan-
dards (Irregular) surveys of the current standards for workplace safety and health. Prerequisite: INEG 2313.

**INEG4233** Occupational Safety and Health Standards (Irregular) surveys of the current standards for workplace safety and health. Prerequisite: INEG 2313.

**INEG4543** Productivity Improvement (Irregular) Analysis of common productivity problems. Development of skills re-
quired to diagnose problems; measure productivity; develop improvement strategies; and provide for the implementation and maintenance of productivity measurement and improve-
ment systems. Prerequisite: Senior standing.

**INEG4553** Application of Machine Vision (Sp) Automated machine vision applied to assembly and inspection tasks tra-
ditionally performed by human operators; development of ap-
plication by acquiring image, processing image data, analyzing image and transmitting results; application analysis, selection and economics. Laboratory required. Corequisite: Lab component. Prerequisite: Senior standing.

**INEG4559** Production Planning and Control (Fa) Strategy development, forecasting, inventory control subject to known demand, inventory control subject to uncertain demand, supply chain management, push and pull production control systems, and operations scheduling. Pre or
Corequisite: INEG 3613. Prerequisite: INEG 2313.

INEG405 Application of Robotics (Fa) Industrial robotics, programming of robotic arms, interfacing and peripheral equipment; sensor technology; machine vision; application analysis; selection and justification; research; economics; and human interface. Laboratory required. Corequisite: Lab component. Prerequisite: Senior standing.

INEG410 Renewable Energy: Green Power Sources (Sp) Current developments in renewable energy from a green power source where electricity, heating and fuel supply can be obtained other than typical energy sources. Technical and economical feasibilities and economic analyses of renewable energy considered for use in residential, small businesses, and industrial complexes. Prerequisite: Senior standing.

INEG440 Systems (Irregular) This course is designed to highlight the major topics in manufacturing systems. Different manufacturing models and metrics are emphasized. This course also introduces classification, general terminology, technical aspects, economics, and analysis of manufacturing systems. Corequisite: Lab component. Prerequisite: INEG 2513 or graduate standing.

INEG463 Transportation Logistics (Irregular) Quantitative aspects of transportation and logistics involving analysis and optimization. Topics include: facility location analysis, network design, flow network and transportation modeling, vehicle routing, fleet sizing, driver assignment, and supply chain issues (logistics demand, role of inventory in the network, supply chain technology, etc.). Prerequisite: INEG 2333 and INEG 3613.


INEG472 Ergonomics (Sp, Fa) The capabilities and limitations of humans are addressed in the context of the person’s interaction with machines and the environment. Topics of discussion include anthropometric considerations in equipment design, human sensory and physiological capabilities in the work environment, selection and training of workers, and the design of work systems. Corequisite: Lab component. Prerequisite: INEG 2333 and INEG 3713.

INEG473 Industrial Ergonomics (Irregular) Gives background and experience in measurement and evaluation of human performance as it pertains to the working environment. The physical, physiological and psychological capabilities of the tasks they are to perform. Laboratory projects required. Prerequisite: INEG 4723 and INEG 2333.

INEG474 Database Concepts for Industrial Engineers (Irregular) An introduction to the basic principles of database modeling and technologies for industrial engineers. Coverage includes analyzing user requirements, representing data using conceptual models and database techniques (e.g. converting conceptual models to relational implementations via database design methodologies, extracting data via structured query language processing, and understanding the role of database management system in developing applications). Corequisite: Lab component. Prerequisite: INEG 2333 and INEG 3713.

INEG512 Industrial Engineering in the Service Sector (Irregular) Review of the development of industrial engineering into the service sector e.g., health care systems, banking, municipal services, utilities, and postal service. Emphasizes those principles and methodologies applicable to the solutions of problems within the service industry. Prerequisite: Graduate standing.

INEG513V Master’s Research Project and Report (Sp, Su, Fa) (1-3) Opportunity for individual study of advanced subjects related to a graduate industrial engineering program to test research hypothesizes to suit individual requirements. Prerequisite: Graduate standing.

INEG524 Automated Manufacturing (Irregular) Introduces to manufacturing processes and concurrent engineering in the design of new product components, materials, design, and process and the processes of fabrication and assembly. Principles of design, productivity, quality, and economics. Emphasis on manufacturability.

INEG5313 Engineering Applications of Probability Theory and Stochastic Processes (Fa) Basic probability theory; random variables and stochastic processes; distribution of sums, products, and quotients of random variables, with application to engineering and Poisson processes. Engineering applications of Markov chains, ergodic theorem, and applications. Prerequisite: INEG 2313 and MATH 2574.

INEG5323 Reliability (Irregular) Reliability and maintenance techniques including probability modeling, statistical analysis, testing and improving. Emphasis on engineering applications and computer and analysis methods. Prerequisite: INEG 2313 or equivalent.

INEG5333 Design of Industrial Experiments (Irregular) Statistical analysis as applied to problems and experiments in engineering and industrial research; experiment design and analysis; probability; and response surface analysis. Prerequisite: INEG 3333.

INEG5343 Advanced Quality Control Methods (Irregular) Acceptance sampling by attributes; single, double, sequential, and multiple sampling plans; sampling plans; sampling plans; Attributes and Variables Sampling. Corequisite: Lecture component. Prerequisite: INEG 2313.

INEG5363 Generalized Linear Models (Irregular) Introduce the generalized linear model (GLM), inference, likelihood and diagnostics. Apply log linear and logistic models. Develop techniques for growth curves, and longitudinal and survival data. Cover spatial and normal linear models, and dynamic GLM for dependent data.

INEG5373 Repairable Systems Modeling (Irregular) Applications of probability, simulation and optimization to problems related to system maintenance and repairable equipment. Prerequisite: Senior standing. Corequisite: Lab component. Prerequisite: INEG 4383 and INEG 5383.

INEG5393 Applied Regression Analysis for Engineers (Irregular) Focuses on the use of modern computer statistical packages techniques for designing experiments, dealing with large data sets; analyzing and using the results of experiments. Prerequisite: INEG 3333. (Same as OMGT 5433)

INEG5403 Decision Models (Irregular) Focus on quantitative and qualitative decision and strategies for technical and managerial problems. Emphasis on application and interpretation of results. Topics include decision trees, influence diagrams, weighting methods, value of information, Analytic Hierarchy Process, Bayes Theorem, Monte Carlo simulation, utility theory, risk analysis, decision group making and expert systems. Prerequisite: INEG 2313. (Same as OMGT 5443).

INEG5423 Introduction to Simulation (Irregular) To understand current developments in applications of flexible automation to industrial processes. Robotics, machine vision and other sensors, machine interface, AMIL and VPP, and simulation languages.

INEG5530 Transportation Logistics (Irregular) Topics in transportation logistics of interest to engineers: routing and scheduling, capacity estimations, Baranovitch’s algorithm, table, and design, application of Geographic Information Systems (GIS) and Global Positioning System (GPS) technologies to transportation systems modeling and analysis. Prerequisite: INEG 5613.

INEG5543 Distribution Center Design & Operations (Irregular) To introduce the student to the field of facility logistics, as applied to distribution centers (DCs). The fundamental areas of facility design and operations (material handling systems) will be covered. Prerequisite: INEG 5513.

INEG5613 Optimization Theory I (Irregular) Basic solutions and algorithms of linear, integer, and nonlinear models. Emphasis on duality and primal dual relationships, computational slackness, revised simplex, interior point algorithms and improving search strategies. Prerequisite: Graduate standing.

INEG5623 Analysis of Inventory System (Irregular) Elements of production and inventory control, economic lot size models, price breaks models using Lagrangian method, deterministic dynamic inventory model, probabilistic one-period and multi-period models, zero and positive lead time models, and continuous review models. Prerequisite: INEG 5513.

INEG5643 Optimization Theory II (Irregular) Classical optimization theory, Lagrangian and Jacobian methods, Kuhn-Tucker theory and constraint qualification, duality in nonlinear problems; separable programming, quadratic programming, geometric programming, stochastic programming, steepest ascent method, convex combinations method, SUMT, Fibonacci search, and golden section method. Prerequisite: INEG 5613.

INEG5653 Modeling and Analysis of Semiconductor Manufacturing (Irregular) Introduction to front end of semiconductor manufacturing processes. This course provides an overview of semiconductor fabrication processes. Topics include an introduction to wafer processing, factory and equipment capacity modeling, automated material handling, simulation, cost modeling, and production scheduling. Prerequisite: INEG 5653.

INEG5663 Analysis of Queuing Systems (Irregular) Poisson axioms, pure birth and death model, queue disciplines (M/M1) and (M/M/c) models, machine servicing model, management of service centers, machine formula, product models, and Markovian models. Prerequisite: INEG 5513.

INEG5683 Nonlinear Programming (Irregular) An introduction to the theory and methodology of non-linear programming. Focus on engineering and management science applications of non-linear optimization. Both single and multi-variable as well as constrained and unconstrained problems are addressed.

INEG5693 Heuristic Optimization (Irregular) Theory and applications of methodological approaches explicitly addressed to heuristic or approximate optimization of integer and combinatorial models. Prerequisite: INEG 5613.

INEG5803 Simulation (Irregular) The development and use of discrete-event simulation models for the analysis and design of systems found in manufacturing, distribution, and service contexts. Corequisite: coverage includes the use of modern computer simulation languages. Prerequisite: Senior standing. Corequisite: INEG 5613.


INEG5893 Applied Regression Analysis for Engineers (Irregular) Focuses on the use of modern computer statistical packages techniques for designing experiments, dealing with large data sets; analyzing and using the results of experiments. Prerequisite: INEG 3333. (Same as OMGT 5433)

INEG5931 Introduction to Simulation (Irregular) Develop and use of discrete-event simulation models for the analysis and design of systems found in manufacturing, distribution, service contexts. Corequisite: coverage includes the use of modern computer simulation languages. Prerequisite: Senior standing. Corequisite: Lab component. Prerequisite: INEG 5613.
ISYS2263 Introduction to Information Systems (Sp, Fa) This course presents the fundamental concepts used in developing information systems. It provides a framework for students to use throughout their software development course work. Also includes management of information systems concepts necessary for an extensive use of business computer systems. Prerequisite: WOCB 1023 and MATH 2053 each with a grade of C or better.

ISYS2393 Business Application Development Fundamentals (Sp) Principles of design and development of windows and web applications using cutting edge visual development tools is the focus of this course. The programming language will be Visual Basic and its use in Windows applications and in conjunction with active server pages and XML for web applications. Prerequisite: ISYS 2263 or CSCE 2014 with a grade of C or better.

ISYS4003H Honors Information Systems Colloquium (Fa) Explores events, concepts and/or new developments in the field of Computer Information Systems and Quantitative Analysis. Prerequisite: Senior standing.

ISYS4233 Seminar in ERP Development (Sp) ERP administration and system development practices. Advanced systems course focuses on Enterprise Resource Planning systems that are used in global organizations. Basic ABAP programming. In addition, students will learn how to provide basic systems administration support of the operating system, database, and application software levels of ERP systems. Prerequisite: WOCB 4223 with a grade of C or better.

ISYS4243 Current Topics in Computer Information (Irregula r) Intensive investigation of selected developments in computer information systems hardware, software, and organization having current impact on computer information systems design and application. Offering an extension of lower-level CIS courses, this research selective study course is open only by pre-arrangement. Prerequisite: ISYS 3960. Prerequisite: Senior standing. May be repeated for up to 6 hours of degree credit.

ISYS4253 Business要知道内和外部资源来支持企业决策。我们将考虑在从机器学习和深度学习中提取有用知识，来支持业务决策。我们将会实施的数据库系统，可以用来支持业务决策。我们将实施的数据库系统，可以用来支持业务决策。

ISYS5363 Business Analytics (Sp) This course in management information technology presents future managers with the key concepts of decision modeling and information technology management. Students will learn to utilize real-time operational business data, as well as quickly process and effectively leverage information. In addition, students will exercise strategic IT deployment skills for supply chain and manufacturing systems. Prerequisite: ISYS 5110 (or equivalent) and WOCB 5213. May be repeated for up to 6 hours of degree credit.

ISYS5355 Information Technology Internship Experience (Sp, Su, Fa) (1-6) This course allows a student to experience an internship within a business and benefit from the applied IT experience. The internship must focus on IT applications/problems and be supervised by a faculty member as well as a member of the firm. Prerequisite: Senior standing. May be repeated for up to 6 hours of degree credit.

ISYS5423 Seminar in Systems Development (Sp) Advanced study of structured systems development. Emphasis on strategic concepts. Prerequisite: ISYS 5110 (or equivalent) and WOCB 5213. May be repeated for up to 6 hours of degree credit.

JAPN3003H Honors Advanced Japanese I (Irregular) Continuation of JAPN 3003 with more complex forms and structures of the language as well as more Kanji (Chinese Characters) aiming at the improvement of all the skills: speaking, listening, writing and reading. Prerequisite: JAPN 3003.
JAPN3013H Honors Advanced Japanese II (Irregular) Continuation of JAPN 3003 with more complex forms and structures of the language as well as more Kanji (Chinese Characters) aiming at the improvement of all the skills: speaking, listening, writing and reading. Prerequisite: JAPN 3003.
JAPN3013H Honors Advanced Japanese II (Irregular) Continuation of JAPN 3003 with more complex forms and structures of the language as well as more Kanji (Chinese Characters) aiming at the improvement of all the skills: speaking, listening, writing and reading. Prerequisite: JAPN 3003.
JAPN3033H Honors Advanced Japanese Conversation (Sp) Conversational practice for advanced learners of Japanese. Designed primarily for students majoring in business, professional schools, etc., which stresses their importance in today's society and introduces the student to the various areas in journalism. Recommended for students considering communication or journalism as a major. Prerequisite: Journalism major or department consent.
JAPN4133H Honors Business Writing in Japanese (Sp) This course aims to familiarize the students with formats, vocabulary, and situational specific expressions in Japanese business correspondence. Prerequisite: JAPN 3013 or equivalent Japanese proficiency.
JAPN4303 Oral Communication & Composition in Japanese (Fa) Designed to strengthen Japanese language skills in oral communication and writing. Consists of conversational activities, presentations and debates, and composition in settings such as business, school, and everyday life. Prerequisite: JAPN 3013 or JAPN 3116, or equivalent Japanese proficiency.
JAPN4303H Honors Oral Communication & Composition in Japanese (Fa) Designed to strengthen Japanese language skills in oral communication and writing. Consists of conversational activities, presentations and debates, and composition in settings such as business, school, and everyday life. Prerequisite: JAPN 3013 or JAPN 3116, or equivalent Japanese proficiency.
JAPN4313 Japanese Culture (Irregular) Insight into Japanese civilization and culture with special emphasis on the areas such as social life and environment, education, religion and customs, and visual and performing arts. This course also discusses western influence on Japanese society, culture and language and how traditional and modern values are manifested in Japanese society. Prerequisite: JAPN 2031. May be repeated for up to 6 hours of degree credit.
JAPN4313L Language and Society of Japan (Fa) The primary objective of this course is to investigate the way the Japanese language reflects the beliefs and customs of the Japanese people as a social group. For comparison purposes, this course makes reference to the beliefs and customs of other languages and cultures. Proficiency in Japanese not required. Prerequisite: Junior standing.
JAPN4313H Honors Language and Society of Japan (Fa) The primary objective of this course is to investigate the way the Japanese language reflects the beliefs and customs of the Japanese people as a social group. For comparison purposes, this course makes reference to the beliefs and customs of other languages and cultures. Proficiency in Japanese not required. Prerequisite: Junior standing.
JAPN4333 Business Writing in Japanese (Sp) This course aims to familiarize the students with formats, vocabulary, and situational specific expressions in Japanese business correspondence. Prerequisite: JAPN 3013 or equivalent Japanese proficiency.
JAPN4333H Honors Business Writing in Japanese (Sp) This course aims to familiarize the students with formats, vocabulary, and situational specific expressions in Japanese business correspondence. Prerequisite: JAPN 3013 or equivalent Japanese proficiency.
JOUR1013 Media and Society (Sp, Fa) A survey of mass media (newspaper, radio, TV, magazine, advertising, public relations, photography, etc.) which stresses their importance in today's society and introduces the student to the various areas in journalism. Recommended for students considering a major in journalism. Prerequisite: Journalism major or department consent.
JOUR1023 Fundamentals of Journalism (Sp, Su, Fa) Introduces students to the skills of observation, critical thinking and writing required in all areas of journalism, as well as to the technology needed in upper- and lower-level courses. Practice using references for grammar and journalistic style. A prerequisite to JOUR 2033, 2063 and 4143. Corequisite: Lab component. Prerequisite: Journalism major or department consent.
JOUR2013 News Reporting I (Sp, Fa) Intensive training in the methods of gathering and writing news. Lecture 2 hours, laboratory 2 hours per week. Prerequisite: JOUR 1023 and JOUR 1033, each with a grade of C or better.
JOUR2013H News Reporting I (Sp, Fa) Intensive training in the methods of gathering and writing news. Lecture 2 hours, laboratory 2 hours per week. Prerequisite: JOUR 1023 and JOUR 1033, each with a grade of C or better.
JOUR2013L Broadcast News Reporting I Laboratory (Sp, Fa) Provides experience in basic broadcast news reporting techniques. Laboratory 3 hours per week. Corequisite: JOUR 2032. Prerequisite: JOUR 1033 with a grade of C or better.
JOUR2022 Broadcast News Reporting I (Sp, Fa) Intensive training in the methods of gathering and writing broadcast news. Lecture 2 hours per week. Corequisite: JOUR 2031L. Prerequisite: Sophomore standing and JOUR 1033 with a grade of C or better.
JOUR2063 Media Technology (Su, Fa) Introduction to computer software used in the profession. Prerequisite: JOUR 2031L and JOUR 1033.
JOUR2311L Photographic I Laboratory (Fa) Photogra-
nalism 1 Lab involves the transfer of images from a digital camera to a computer, and involves the use of image editing and enhancement software as well as layout and design software. Corequisite: JOUR 2332.

JOUR2332 Photo Journalism I (Fa) Beginning course in the fundamentals of photography, including digital photography, computer image management, image enhancement, and layout and design. Corequisite: JOUR 2331L.

JOUR2453 Introduction to Sports Television Production I (Fa) Introduction to the specialized field of sports television production emphasizing studio and field production. Studio lab and field work outside of regularly scheduled class time required. Prerequisite: JOUR 2032 or instructor consent.

JOUR3022 News Reporting II (Sp, Su, Fa) Continuation of JOUR 3011. Lecture 2 hours, laboratory 2 hours per week. Corequisite: Lab component. Prerequisite: JOUR 2013.

JOUR3071L Broadcast News Reporting I Laboratory (Sp, Fa) Continuation of JOUR 3011. Including advanced skills in broadcast news techniques. Corequisite: JOUR 3072. Prerequisite: JOUR 2032 and JOUR 2031L.

JOUR3072 Broadcast News Reporting II (Sp, Fa) Continuation of JOUR 3011. Including advanced methods of gathering and writing broadcast news. Corequisite: JOUR 3071L. Prerequisite: JOUR 2032 and JOUR 2031L.

JOUR3083 Photography II (Sp) Study of non-fiction newspapers and magazine articles with emphasis on locating subjects, and on writing techniques and practice in article writing. Prerequisite: JOUR 2013.

JOUR3133 Editorial Writing (Irregular) Study of the opinion function of the news media. Includes editorial writing, the newspaper editorial/opinion columns, letters from readers, and broadcast commentary. Prerequisite: JOUR 3011 or JOUR 3013 L. Jr. or Sr. standing.

JOUR3163 Sports Journalism (Ja) Emphasis on techniques and principles of coverage of sports and sports-related subjects on and off the field, and on the relationship between sports and journalism. Prerequisite: JOUR 3072.

JOUR3263 African Americans in Film (Irregular) A survey of the history of images of African Americans in film, especially as these images are examined in the context of stereotypical renditions of African American character and experiences. Issues of African American history, culture, and socio-political context will be addressed in the analyses of these films. Prerequisite: ENGL 1023 and advanced standing. (Same as AAST 3263, COMM 3263, ENGL 3263.)

JOUR3453 Sports Television Production II (Irregular) Advanced production techniques in the specialized field of sports television production. Focuses on multi-camera, single-camera and studio production. Studio lab and field work outside of regularly scheduled class time required. Prerequisite: JOUR 2453 or instructor consent.

JOUR3633 Media Law (Sp, Fa, Su) Constitutional guarantees, statutory laws and court cases applicable to mass communication. Prerequisite: JOUR 2453. Jr. or Sr. standing.

JOUR3723 Advertising Principles (Sp, Fa) Introductory course to the field of advertising. The course includes a study of the role of advertising in modern society with emphasis being given to the extent and manner of use of advertising in newspapers, magazines, radio, television, and other media. Prerequisite: Junior standing and 2.5 overall grade point average.

JOUR3733 Covering the Courts (Sp) Explores the mechanics of covering trials and other aspects of legal affairs reporting. Prerequisite: JOUR 3633.

JOUR3933 Crisis Communication Principles (Sp, Fa) Study of theory, methods, and ethics of public relations in modern society, business, and communications. Influencing opinion through acceptable performance and 2-way communication. Recommended for students in many fields. Prerequisite: Junior standing and 2.5 overall grade point average.

JOUR4013 Visual Practices (Sp, Fa) (1-4) Study of advanced journalistic practices and methods, individual or group projects. Prerequisite: Junior standing and 10 hours JOUR 2032 or instructor consent. May be repeated for credit up to 3 hours of degree credit.

JOUR4033 Advanced Radio News Reporting (Sp) Intensive training in the production of in-depth, public radio style news stories. Prerequisite: JOUR 2032 and JOUR 2031L.

JOUR4043 Government and the Media (Fa) Focuses on the links between mass media and government and the increasingly significant role of media in politics and government. Examines the power, responsibility, and performance of the press and public officials/government agencies in their relationship with each other. Prerequisite: Junior standing.

JOUR405V Specialized Journalism Seminar (Irregular) (1-4) Students interested in advanced forms of mass communication. Students undertake projects related to particular aspects or problems of journalism. Content varies. May be repeated for credit up to 12 hours toward degree credit. Prerequisite: 20 credit hours.

JOUR4063 Computer-Assisted Publishing (Irregular) In-depth, hands-on exploration of computer hardware and software in the design and production of media messages. Examination of development and design of websites and the computer’s influence on design and conceptualization.

JOUR4141 Public Relations Writing (Sp, Fa) Instructional and writing practice to develop the professional-level writing skills required of public relations practitioners. Emphasizes different approaches required for different audiences and media. Prerequisite: JOUR 1033 with a grade of C or better and JOUR 2032 and JOUR 3743, each with a grade of B or better; overall GPA of 2.5 or higher; Journalism major in the AD/PR Sequence; and senior status - minimum of 90 hours completed.

JOUR4233 School Publications (Irregular) Primarily for students intending to teach journalism or to supervise publications in high schools. Prerequisite: Advanced standing.

JOUR4333 Ethics in Journalism (Irregular) Critical examination of specific ethical problems confronting professionals in all areas of mass communications. Reading and writing assignments are aimed at developing an understanding of the nature of the mass media and their social responsibilities. Prerequisite: Junior standing.

JOUR4413 Broadcast Advertising and Sales (Fa) The creation, selling, and production of broadcast media sound and techniques involved in the production of these campaigns to prospective media buyers. Emphasis is also placed on the gathering and use of rating systems for broadcasting. Prerequisite: JOUR 1033 with a grade of C or better and JOUR 2032 and JOUR 3743, each with a grade of B or better; overall GPA of 2.5 or higher; Journalism major in the AD/PR Sequence; and senior status - minimum of 90 hours completed.

JOUR4423 Creative Strategy and Execution (Sp, Fa) The creation of advertising copy and layout for the mass media with emphasis on strategy, the written message, and the physical appearance for the advertisement. Includes laboratory component.

JOUR443V Event Promotion and Execution (Sp) Practicum for students to plan, design, promote and execute several Journalism Days events to include the Roy Reed Lecture, a scholarship reception, a job fair, Senior Salute and a fundraiser. Prerequisite: JOUR 3723 and JOUR 3743.

JOUR4453 Media Planning & Strategy (Sp, Fa) Includes the study of media characteristics, market research, media strategies, market analysis, media-market measurements and the development of media plans. Emphasis is placed on the analysis of major mass media strategies, tactics, and plans. Prerequisite: JOUR 1033 with a grade of C or better, and JOUR 2032 and JOUR 3743, each with a grade of B or better; overall GPA of 2.5 or higher; Journalism major in the AD/PR Sequence; and senior status-minimum of 90 completed.

JOUR4463 Campaigns (Sp, Su, Fa) Applying advertising principles to develop complete cam¬paign; determining agency responsibilities, marketing objectives and research, media mix, and creative strategy. Empha¬sis also given to campaign presentation delivery, utilizing audio and visual techniques. Prerequisite: A grade of B or better in both JOUR 3723 and JOUR 3743.

JOUR4533 Magazine Editing and Production I (Sp) Flows of wire and producing versions of various types of magazines. Course includes magazine design, selecting and editing stories and photographs, laying out the story and photo and other mechanical processes. Lecture 2 hours, laboratory 2 hours per week. Prerequisite: JOUR 3723 and JOUR 3731.

JOUR4553 Magazine Editing and Production II (Sp, Fa) Continuation of JOUR 3723 and JOUR 3731L. Includes the specialized knowledge and skills needed in field reporting, anchoring, writing, and producing news for commercial television. Lab component arranged. Corequisite: Lab component. Prerequisite: JOUR 3723 and JOUR 3731L.

JOUR4873 Television News Reporting II (Sp, Fa) Continuation of JOUR 4863. Laboratory component arranged. Prerequisite: JOUR 4863.

JOUR4903 Community Journalism (Sp) This three-hour course is aimed at students interested in advanced forms of mass communication. Students will gain an understanding of the role of the black press from its beginnings in 1827 through the civil rights movement. Prerequisite: Junior standing. (Same as AAST 4903)

JOUR4907 Journalism Writing Requirement (Sp, Su, Fa) Directed study in conceptualizing, researching, and writing a major paper to meet the college writing requirement; includes presentations and discussions on current issues in journalism news and strategic communication. Students must write a paper to pass this course. Prerequisite: Junior standing. The minimum goal is to publish a paper. Prerequisite: Junior standing.

JOUR4923 History of the Black Press (Even years, Sp) Covers the historic context of contributions and innovations to U.S. newspapers by African Americans. Also investigates the role of the black press from its beginnings in 1827 through the civil rights movement. Prerequisite: Junior standing. (Same as AAST 4923)

JOUR4996V Specialized Journalism Seminar (Irregular) (1-3) Seminar course involving the critical examination of the major themes and theories and/or issues relevant to advertising and public relations. May be repeated for credit up to 3 hours of degree credit.

JOUR5003 Advanced Reporting (Irregular) Stress public affairs coverage, interpretive, investigative, and analytic reporting. Prerequisite: Graduate standing or honors program. May be repeated for credit up to 3 hours of degree credit.

JOUR5033 Critical and Opinion Writing and Commentary (Irregular) Experience in writing and analyzing columns, editorials and letters to the editor. Prerequisite: a grade of B or better in all GPA of 2.5 or higher; Journalism major in the AD/PR Sequence; and senior status - minimum of 90 completed. (Same as AAST 5033).

JOUR5063 Issues in Advertising and Public Relations (Fa) Seminar course involving the critical examination of the major cultural, social, political, economic, ethical and persuasion theories and/or issues relevant to advertising and public relations affecting individuals, organizations, societies. Prerequisite: Graduate standing. (Same as AAST 5063)

JOUR5065 Research Methods in Journalism (Sp) Research methods of utility in journalism. Emphasis on survey research, electronic data base searching, and traditional library research. Prerequisite: Graduate standing or honors program standing.

JOUR5066 Issues in Advertising and Public Relations (Fa) Seminar course involving the critical examination of the major cultural, social, political, economic, ethical and persuasion theories and/or issues relevant to advertising and public relations affecting individuals, organizations, societies. Prerequisite: Graduate standing. (Same as AAST 5066)

JOUR5067 Propaganda and Public Opinion (Irregular) Examine and analyzes the means of influencing and measuring public opinion, with an emphasis on survey research and polling. Prerequisite: Graduate standing or honors program standing.

JOUR5193 Professional Journalism Seminar (Irregular) Examination of complex problems encountered by professional journalists with a focus on research and analysis of the role of journalism in major social, economic, and political developments. May be repeated for up to 6 hours of degree credit.
KINS223 Motor Development (Sp, Su, Fa) An overview of contemporary motor development and movement theory, development hierarchies, and physiological aspects of development throughout the lifespan.

KINS239 Prevention and Care of Athletic Injuries (Irreg) Introduction to the prevention and care of athletic related injuries. Studying injury, recognizing, and management. Prerequisite: BIOL 2443 and BIOL 2441L.

KINS273 Seminar in Exercise Science (Sp) This class will cover special topics for the Exercise Science students in preparation for entry into the profession. In addition to specific topics, students will prepare their resumes and make a formal presentation.

KINS315 Exercise Physiology (Su, Fa) Examination of effects of exercise on the physiological systems of the body. The exploration of muscle, immediately after, and as long term results of work and exercise. Prerequisite: BIOL 2123/2121L and CHEM 1123/1121L.

KINS315H Honors Exercise Physiology (Sp, Su, Fa) Examination of the effects of exercise on the physiological systems of the body. The exploration includes effects during, immediately after, and as long term results of work and exercise. Prerequisite: BIOL 2123/2121L and CHEM 1123/1121L.

KINS316 Exercise Physiology: Theory and Application (Sp, Fa) Examination of the changes during childhood and adolescence of physiological responses to exercise. The exploration includes the study of the maturation of the body’s functions and the impact of exercise on physical education Teacher Education majors. Prerequisite: BIOL 2443 and BIOL 2441L and KINS 2223; for K-12 or P-12 physical education majors only.

KINS317 Exercise Physiology: Theory and Application (Sp, Fa) Examination of the changes during childhood and adolescence of physiological responses to exercise. The exploration includes the study of the maturation of the body’s functional capacities as it relates to exercise. Designed for Physical Education Teacher Education majors. Prerequisite: BIOL 2443 and BIOL 2441L; and KINS 2223; for K-12 physical education majors only.

KINS353 Mechanics of Human Movement (Sp, Su, Fa) An introduction to basic analysis of motor skills. No credit given toward major in Zoology. Prerequisite: BIOL 2443 and BIOL 2441L, KINSSB major or by instructor consent.

KINS353H Honors Mechanics of Human Movement (Sp, Su, Fa) An introduction to basic analysis of motor skills. No credit given toward major in Zoology. Prerequisite: BIOL 2443 and BIOL 2441L, KINSSB major or by instructor consent.

KINS405V Independent Study (Sp, Su, Fa) (1-3) Provides an opportunity to pursue special study of research problems. May be repeated for up to 12 hours of degree credit. KINS405VH Honors Independent Study (Sp, Su, Fa) (1-3) Provides an opportunity to pursue special study of research problems. May be repeated for up to 12 hours of degree credit.

KINS433 Analytical Basis of Movement Science (Sp) This course introduces and applies the principles of biomechanics in the field of kinesiology. Prerequisite: KINS 3355 and KINS 3533 and PHYS 2013/2011L and CHEM 2613/2611L or CHEM 3603/3601L.

KINS434S Honors Organization, Management, and Marketing Skills for the Kinesiology Professional (Sp, Fa) Organization, policies, management principles, and marketing skills for the Kinesiology professional.

KINS4773 Performance and Drugs (Sp) The physiological and psychological effects of ergogenic aids upon the athlete and performance coupled with the ethical and moralistic viewpoints of drug taking. Practical laboratory experiences are provided with pertinent statistical surveys of athletes; their drug taking habits and relevant psychological impact on performance. Prerequisite: KINS 3153.

KINS4833 Exercise Applications for Special Populations (Fa) The study of the effects of exercise, exercise training, and other stressors in special groups. A detailed study of the biomechanical and physiological effects of exercise on the elderly, the diabetic, the post-corporeal, and the individual with functional limitations. Prerequisite: KINS 3355 and KINS 3533.

KINS4903 Internship in Exercise Science (Sp, Fa) Provides opportunities for students in Exercise Science to gain experience in clinics, hospitals, fitness centers, athletic training facilities or related settings. Enrollment is limited to students in exercise science having taken KINS 3355 and KINS 3533. Prerequisites: KINS 3353 and KINS 3333 and COMM 1313. May be repeated for up to 12 hours of degree credit.

KINS523 Biomechanics I (Fa) Intended to serve as in introduction to the biomechanical principles involved in understanding and analyzing human motion.

KINS5333 Instrumentation in Biomechanics (Irreg) The application of knowledge and skills necessary for data collection for sports analysis. Provides valuable information on instrumentation used specifically in biomechanics. Prerequisite: KINS 3523.

KINS5423 Assessment and Prescriptive Programming in the Adapted KINS (Odd years, Sp) Instruction in the assessment, prescription, and use of instruction methods, materials, and equipment relevant to specific handicapping conditions in the adapted physical education setting.

KINS5483 Practical Applications in Physical Education (Irregular) Deals with the application of skills, knowledge and concepts necessary for planning, organizing and conducting adapted physical education programs through supervised field experiences.

KINS5513 Physiology Exercise I (Fa) A study of the foundations literature in exercise physiology. Emphasis is placed on the muscular, cardiovascular, and respiratory systems.

KINS5523 Muscle Metabolism in Exercise (Sp) A study of the metabolic changes that occur in muscle as a result of exercise, exercise training, and other stressors. Prerequisite: KINS 5513 or equivalent.

KINS5533 Cardiovascular Rehabilitation Program (Even years, Sp) An examination of the concepts, design, and implementation of cardiac rehabilitation programs. Emphasis on exercise programs but reference to nutrition, psychology, and other life-style interventions.

KINS5543 Cardiovascular Function in Exercise (Fa) Study of the effects of exercise training and other stressors on the cardiovascular system. Detailed study of the components of the cardiovascular system and adaptations of those components to selected stimuli. Prerequisite: KINS 5513 or equivalent.

KINS5593 Practicum in Laboratory Instrumentation (Su, Fa) Prerequisite: BIOL 2443 and BIOL 2441L. This course is a laboratory portion of the instrumentation laboratory. Objective is to quantify physiological parameters, leading to the individualized exercise prescription. KINS5613 Physical Dimensions of Aging (Odd years, Sp) Principles of exercise training and physical changes with healthy aging, pathophysiology of age-related diseases, testing issues, exercise interventions, and the psychosocial aspects of aging. Prerequisite: KINS 5513.

KINS5643 Motor Learning (Sp) Concepts of motor learning and control are presented. Attention is given to analysis of research literature in movement control, motor behavior, and motor learning.

KINS774V Internship (Sp, Fa) May be repeated for up to 6 hours of degree credit.

KINS7753 Psychological and Physical Aspects of Exercise in the Developing Athlete (Irregular) Provides students with an opportunity to pursue special study of educational problems. May be repeated for up to 3 hours of degree credit.

KINS8323 Biomechanics II (Odd years, Sp) Analysis of human movement with emphasis on sports skills by application of principles of anatomy, kinesiology, and cinematographical and video analysis. Prerequisite: KINS 5333.

KINS8343 Physiology of Exercise II (Even years, Su) Detailed study of the body systems affected by exercise, the functions of these systems during exercise, the effects of age, sex, body type, nutrition, and other factors that can affect the body’s functional capacities as it relates to exercise, and the pharmacological and physiological effects of ergogenic aids upon the athlete and performance coupled with the ethical and moralistic viewpoints of drug taking. Practical laboratory experiences are provided with pertinent statistical surveys of athletes; their drug taking habits and relevant psychological impact on performance. Prerequisite: BIOL 2213 and BIOL 2211L or equivalent.

KINS859V Independent Research (Sp, Su, Fa) (1-3) Devel- opmental, implementation, and completion of basic or applied research project. Prerequisite: M.S. degree program in exercise and movement sciences and HKRD 5353 and EDFD 5393.

KINS600V Master’s Thesis (Sp, Su, Fa) (1-6) Provides an opportunity for an M.A. or M.S. student to work toward completion of a thesis in the area of the student’s choice. Requires 12 semester hours or the equivalent.

LARC1003 Basic Course in the Arts: The American Landscape (Sp, Fa) Mankind’s changing attitudes toward urban and rural outdoor spaces and their aesthetic and cultural values. The origins of the environmental/conservation movement and the development of an American land ethic. Appreciation of the relationship of the natural and historic landscape to the arts and the aesthetic importance of open space.

LARC1011 Leadership by Design I (Fa) Introduces time management, study strategies, promotes solutions for maintain- ing personal health, and develops communication and leadership skills intended to benefit education, career, and the community.

LARC1012 Leadership By Design II (Sp) Introduces time management, study strategies, promotes solutions for main- taining personal health, and develops communication and leadership skills intended to benefit education, career, and the community.

LARC1211 Introduction to Landscape Architecture I (Fa) This course is an interdisciplinary introduction to basic princi- ples of design, the natural landscape, urbanism and the public realm. Lecture is one hour per week. Corequisite: LARC 1315.

LARC1212 Introduction to Landscape Architecture II (Sp) Theoretical, formal, and constructive principles and their im- pact in the design discipline, modernism and after. Introduction to the intellectual and philosophical foundations of landscape architecture. Lecture 1 hour per week. Prerequisite: LARC 1211 and LARC 1315. Corequisite: LARC 1325.

LARC1315 Landscape Architecture Design I (Fa) Theory and practice of traditional and contemporary techniques in the design of landscape architecture. Students may be required to develop site analysis graphics leading to design conceptualization. Study and studio. Corequisite: LARC 1212. Prerequisite: LARC 1315 and LARC 1211.

LARC1325 Landscape Architecture Design II (Sp) Basic concepts of spatial, visual, and experiential analysis are used in the investigation and evaluation of designed landscapes. Introduction to three-dimensional spatial organization systems and the design process. Concepts used in developing and analyzing visual and spatial data using graphic techniques. LARC 1215 and LARC 1315. Corequisite: LARC 1325.

LARC1315 Landscape Architecture Design I (Fa) Theory and practice of traditional and contemporary techniques in the design of landscape architecture. Students may be required to develop site analysis graphics leading to design conceptualization. Study and studio. Corequisite: LARC 1212. Prerequisite: LARC 1315 and LARC 1211.

LARC1325 Landscape Architecture Design II (Sp) Basic concepts of spatial, visual, and experiential analysis are used in the investigation and evaluation of designed landscapes. Introduction to three-dimensional spatial organization systems and the design process. Concepts used in developing and analyzing visual and spatial data using graphic techniques. LARC 1215 and LARC 1315. Corequisite: LARC 1325.
Course Descriptions

LARC2123 Design Communications II (Sp) Builds upon LARC 2113 by introducing advanced graphic techniques in the communication of landscape designs and planning, and in professional practice. Focus is on the software required for sophisticated renderings and visualizations, and to manage and interpret landscape data to the regional level. 

LARC2336 Landscape Architecture Design III (Fa) Introduction to design process(ies) which responds to site and context. Reinforcement of design principles and organization systems applied to small scale projects. Studio and lecture. Prerequisite: LARC 1221 and LARC 1325.

LARC2346 Landscape Architecture Design IV (Sp) (Formerly LARC 3345) Expansion of abilities to analyze existing conditions, site and societal issues, and the development of meaningful and sympathetic solutions. Emphasis is on presentations and the use of pre-existing graphic documentation. Studio and lecture. Prerequisite: LARC 2336 and LARC 3413.

LARC2346H Honors Landscape Architecture Design IV (Sp) (Formerly LARC 3345) Expansion of abilities to analyze existing conditions, site and societal issues, and the development of meaningful and sympathetic solutions. Emphasis is on presentations and the use of pre-existing graphic documentation. Studio and lecture. Prerequisite: LARC 2336 and LARC 3413 and Honors candidacy.

LARC2714 Landscape Architecture Construction I (Sp) (Structures) Introduction into the design and fabrication methods of structures in the landscape. Emphasis on statics and accurate dimensioning and working drawing practices. Introduction to dimensioning and drafting systems and drafting specifications. Lecture and laboratory. Prerequisite: LARC 2714 and Honors candidacy.

LARC2933 Cultural Landscape Studies (Su) The examination of cultural landscape forms, their historic and evolutionary development. Includes study of cultural, political, and site context influences. Required field trip component of study abroad. Prerequisite: LARC 3413 and LARC 3821.

LARC402V Special Studies (Irregular) (1-6) Individual or group study and practicum involving landscape design, history, and environmental analysis. May be repeated for up to 4 hours of degree credit. 

LARC402VH Honors Special Studies (Irregular) (1-6) Individual or group study and practicum involving landscape design, history, and environmental analysis. May be repeated for up to 4 hours of degree credit. 

LARC4376 Landscape Architecture Construction II (Sp) (Structures) Introduction into the design and fabrication methods of structures in the landscape. Emphasis on statics and accurate dimensioning and working drawing practices. Introduction to dimensioning and drafting systems and drafting specifications. Lecture and laboratory. Prerequisite: LARC 3413 and LARC 4413 or instructor consent.

LARC4313H Honors History of Landscape Architecture (Fa) Analysis of the relationship between existing landscapes and human cultural development as reflected in the meaning and organization of landscape designs at community and project scales from the neolithic period to the mid-nineteenth century. Prerequisite: Honors candidacy.

LARC4374 Landscape Construction II (Fa) Introduction to the design and construction of Free Standing Elements and Assembly. Emphasis on material properties and how those properties affect the materials use in the landscape and interactions with other materials. Introduction to dimensioning and drafting methods of free-standing and retaining walls, and structural elements. Advanced technical drawing component and computer integration of design production. Lecture and laboratory. Prerequisite: LARC 3723.

LARC4374H Honors Landscape Architecture Construction II (Fa) (Structures) Introduction into the design and fabrication methods of structures in the landscape. Emphasis on statics and accurate dimensioning and working drawing practices. Introduction to dimensioning and drafting systems and drafting specifications. Lecture and laboratory. Prerequisite: Honors candidacy.

LARC4373A Landscape Architecture Construction III (Sp) (Structures) Introduction into the design and fabrication methods of structures in the landscape. Emphasis on statics and accurate dimensioning and working drawing practices. Introduction to dimensioning and drafting systems and drafting specifications. Lecture and laboratory. Prerequisite: LARC 3723.

LARC4314 Planting Design I (Fa) Introduction to small scale projects involving use of plant materials in relation to other landscape elements, formation of a vocabulary of plant materials and integration of planting plans and applicable specifications. Includes laboratory. Prerequisite: HORT 3103.

LARC4314H Honors Planting Design I (Fa) Introduction to small scale projects involving use of plant materials in relation to other landscape elements, formation of a vocabulary of plant materials and preparation of integrated planting plans and applicable specifications. Includes laboratory. Prerequisite: LARC 3723 and Honors candidacy.

LARC3356H Honors Landscape Architecture Design V (Fa) (Formerly LARC 3355) Investigation of social behavior as applied to program and design that serves human needs. Projects reflect increased scope, scale, and resolution with a detailed design component. Studio and lecture. Prerequisite: LARC 2346 and LARC 2714; Honors candidacy and acceptance into the professional program.

LARC3356 Landscape Architecture Design VI (Sp) (Formerly LARC 4365) Investigation of ecological determinism, historic and contemporary planning, and sustainable design as distinct approaches to landscape architecture. Studio and lecture. Prerequisite: LARC 3356.

LARC3366H Honors Landscape Architecture Design VI (Sp) Investigation of ecological determinism, historic and contemporary planning, and sustainable design as distinct approaches to landscape architecture. Studio and lecture. Prerequisite: LARC 3356 and Honors candidacy.

LARC3413 History of Landscape Architecture (Fa) Analysis of the relationship between existing landscapes and human cultural development as reflected in the meaning and organization of landscape designs at community and project scales from the neolithic period to the mid-nineteenth century. Prerequisite: Honors candidacy.

LARC3473A Landscape Architecture Construction III (Sp) (Structures) Introduction into the design and fabrication methods of structures in the landscape. Emphasis on statics and accurate dimensioning and working drawing practices. Introduction to dimensioning and drafting systems and drafting specifications. Lecture and laboratory. Prerequisite: LARC 3723.

LARC4372H Honors Landscape Architecture Design VII (Fa) Synthesis of all previous course work; an introduction to the theory and practice of larger scale planning with an emphasis on design of systems in urbanizing environments. Studio and lecture. Prerequisite: LARC 3366 and LARC 4413 and Honors candidacy.

LARC4381 Senior Project Preparation (Sp) Definition and planning of personally selected senior demonstration project. Includes documentation of research, design, production, and site development. Prerequisite: HLAR 4736 and Honors candidacy. 

LARC4381H Honors Senior Project Preparation (Sp) Definition and planning of personally selected senior demonstration project. Includes documentation of research, design, production, and site development. Prerequisite: HLAR 4736 and Honors candidacy.

LARC4413 Contemporary Landscape Architecture (Sp) Critical study and analysis of landscape architecture from mid-nineteenth century to the present. Emphasis on the philosophical and design theories that have influenced the form of gardens, parks, and cities. Prerequisite: Honors candidacy.

LARC4714 Landscape Architecture Construction IV (Fa) (Systems) Introduction to systems of landscape architectural construction including stormwater management, lighting, irrigation, water features, and erosion control. Emphasis on advanced design and detailing strategies, materials, and equipment used in stormwater system design and calculations. Significant integration of computer generated drawings. Lecture and laboratory. Prerequisite: LARC 2714.

LARC4714H Honors Landscape Architecture Construction IV (Fa) (Systems) Introduction to systems of landscape architectural construction including stormwater management, lighting, irrigation, water features, and erosion control. Emphasis on advanced design and detailing strategies, materials, and equipment used in stormwater system design and calculations. Significant integration of computer generated drawings. Lecture and laboratory. Prerequisite: LARC 2714 and Honors candidacy.

LARC5043 Landscape Architecture Seminar (Irregular) The role of the landscape architect in contemporary society; how this is affected by technological change and awareness of ecological problems. Group discussions, individual research projects, and guest lectures. Prerequisite: Fourth-year standing.

LARC5053 Historic Landscape Preservation (Irregular) Survey of historic preservation as a profession and the emerging cultural landscape preservation movement. Introduction to preservation principles as described by the Secretary of the Interiors Standards and Guidelines. Analysis of case studies will reinforce basic philosophies and introduce preservation approaches. Prerequisites: LARC 3413 and LARC 4413.

LARC5053H Honors Historic Landscape Preservation (Irregular) Survey of historic preservation as a profession and the emerging cultural landscape preservation movement. Introduction to preservation principles as described by the Secretary of the Interiors Standards and Guidelines. Analysis of case studies will reinforce basic philosophies and introduce preservation approaches. Prerequisites: LARC 3413 and LARC 4413.

LARC5063 Alternative Stormwater Management (Irregular) Introduction to the role of alternative stormwater management techniques toward a more sustainable development to include constructed wetlands, bioswales, rain water harvesting, green roofs, and other stormwater reduction techniques. Emphasis on multidisciplinary team approach to problem solving. This course is open to non-majors and includes both lecture and laboratory formats.

LARC5386 Landscape Architecture Design VIII (Sp) Investigation of the relationship between development, stewardship and land use of the regional scale. Natural resource systems, public policies, regional economics, and social contexts inform environmental land use planning and design decisions. Geographic information systems (GIS) used as an analysis tool. Lecture and GIS lab. Prerequisite: LARC 4376 or instructor approval.

LARC5386H Honors Landscape Architecture Design VIII (Sp) Investigation of the relationship between development, stewardship and land use of the regional scale. Natural resource systems, public policies, regional economics, and social contexts inform environmental land use planning and design decisions. Geographic information systems (GIS) used as an analysis tool. Lecture and GIS lab. Prerequisite: LARC 4376 or instructor approval.

LARC5396 Landscape Architecture Design IX (Senior Demonstration Project) (Fa) Advanced design studio with an emphasis on individual or team research and design reso-
Latin Amer. and Latin Studies (LAST)

LAST2013 Latin American Studies (Fa) This course provides an interdisciplinary introduction to Latin America. Drawing on Latin American literature, history, sociology, and political science, the course examines the broad forces that have shaped the region. (Same as ANTH 1013)

LAT3399H Honors Thesis (Sp, Fa) (1-6) Prerequisite: Junior standing.

LAT4003 Latin American Studies Colloquium (Sp) An interdepartmental colloquium with an annual change in subject matter, required of all Latin American studies majors. Prerequisite: Sophomore standing for Latin American studies majors and honors students. May be repeated for up to 6 hours of degree credit.

LATN1003 Elementary Latin I (Fa) The rudiments of classical Latin, with concentration on grammar, vocabulary, and syntax. Short selections from ancient authors lead to basic reading skills.

LATN1013 Elementary Latin II (Sp) A continuation of the rudiments of classical Latin, with concentration on grammar, vocabulary, and syntax. Short selections from ancient authors lead to basic reading skills.

LATN2003 Petronius' Satyricon (Fa) Development of reading skills through selections from Satyricon, and an introduction to the culture and history of the late republic through the critical study of the novel in translation. Prerequisite: LATN 1013 or equivalent.

LATN2013 Catullus and Propertius (Sp) Development of reading skills through selections from Catullus' poems, and an introduction to the culture and history of the late republic through the critical study of Propertius' works in translation and secondary works. Prerequisite: LATN 2003 or equivalent.

LATN3003 Virgil and Ovid (Fa) Selections from the Aeneid and/or the Metamorphoses, and an introduction to Roman literary history through the critical study of these works in translation. Prerequisite: LATN 2013 or equivalent.

LATN3013 Caesar (Sp) Selected readings from Caesar's commentaries on Gallic or Civil Wars, and an overview of Republucan political and military practices through the critical study of the commentaries in translation and secondary works. Prerequisite: LATN 3003 or equivalent.

LATN3063 Intensive Elementary Latin Reading (Su) Overview of Latin grammar, vocabulary and syntax, leading to reading proficiency. Prerequisite: LATN 1003 or placement determined by the advisor. 

LATN4003 Roman History (Irregular) Selections from Sallust, Livy, Tacitus, or Suetonius. An overview of Roman historiography through the critical study of complete works in translation and secondary works. Prerequisite: LATN 3013 or equivalent.

LATN4013 Roman Satire (Irregular) Selections from the satires of Horace, Juvenal, Persius, or Sestus. An overview of Roman humor and the genre of satire through the critical study of complete works in translation and secondary works. Prerequisite: LATN 3013 or equivalent.

LATN4023 Roman Didactic Epic (Irregular) Selections from Virgil's Georgics, Lucretius' De Rerum Natura, or Manilius' Astronomica. An overview of Roman philosophical poetry through the critical study of complete works in translation and secondary works. Prerequisite: LATN 4013 or equivalent.

LATN4033 Roman Drama (Irregular) Selections from Plautus, Terence, or Seneca. An overview of Roman theater through the critical study of complete works in translation and secondary works. Prerequisite: LATN 3013 or equivalent.

LATN4043 Roman Elegy (Irregular) Selections from Properius, Tibullus, or Ovid. An overview of the genre through the critical study of complete works in translation and secondary works. Prerequisite: LATN 3013 or equivalent. May be repeated for up to 6 hours of degree credit.

LATN4073 Roman Novel (Irregular) Selections from Petronius or Apuleius. An overview of the genre through the critical study of complete works in translation and secondary works. Prerequisite: LATN 3013 or equivalent. May be repeated for up to 6 hours of degree credit.

LATN4083 Roman Oratory (Irregular) Selections from the orations and theoretical works of Cicero, Seneca the Elder, or Quintilian. An overview of the genre through the critical study of complete works in translation and secondary works. Prerequisite: LATN 3013 or equivalent.

LATN4093 Roman Philosophy (Irregular) Selections from the philosophical works of Cicero or Seneca. An overview of Roman philosophy through the critical study of complete works in translation and secondary works. Prerequisite: LATN 3013 or equivalent. May be repeated for up to 6 hours of degree credit.

LATN475V Special Investigations (Irregular) (1-6) May be repeated for credit.

LATN5633 Medieval Latin (Irregular) Selections from medieval writers from the 4th to the 17th century. Prerequisite: LATN 3003 or equivalent.

LATN670V Special Investigations (Irregular) (1-6) May be repeated for credit.

LATN1003 Latin I (Fa) The rudiments of classical Latin, with concentration on grammar, vocabulary, and syntax. Short selections from ancient authors lead to basic reading skills.

Law (LAW)

LAW400V Entertainment Law (Irregular) (1-6) Examines the legal principles and relationships of the entertainment industry, with a primary emphasis on the music industry; provides an introduction to the practice of entertainment law and the negotiation of entertainment contracts; highlights a variety of legal and practical issues that arise when representing clients in the entertainment industry.

LAW4012 Legal Research, Writing & Trial Skills II (Sp) An introduction to the persuasive writing for trial and appellate courts. Emphasis will be placed on intermediate library research techniques and basic legal research using computers. Students will also engage in oral argument and trial advocacy.

LAW4013 Legal Research & Writing I (Fa) An introduction to the special problems posed by the legal analysis and the expression of the results of that process. The primary emphasis will be on basic analytical skills for students with little or no legal training, such as research, analysis, written and oral communication skills, and proper citation form. Students will complete a series of writing assignments.

LAW4023 Contracts I (Sp, Su, Fa) Formation and enforcement by litigation and commercial arbitration of commercial and family agreements. Mutual assent or consideration; third-party beneficiaries; assignments; joint obligation; performance; anticipatory breach; discharge of contractual duties; and the Statute of Frauds.

LAW4033 Contracts II (Sp, Su, Fa) Contract interpretation and enforcement, remedies for breach, including anticipatory breach, justifications for breach, third party beneficiaries, agency and delegation. Prerequisite: LAW 4023.

LAW4035 Property I (Sp, Su, Fa) Emphasis is on real property. Basic concepts are covered, including property rights in lost and found articles (general property concepts), types and historical development of estates, and other interests in land. Property transfer techniques, such as gifts, leases (landlord and tenant), and the sale of land are also considered. Land transfer techniques, including the land sale contract, the deed, the recording system, and methods of real property title assurance are discussed. Certain aspects of land use controls are explored briefly.

LAW5013 Criminal Procedure (Sp, Su, Fa) Concerned with the legal steps through which a criminal proceeding passes, commencing with the initial investigation of a crime and concluding with the release of the defendant. Does not deal exclusively with constitutional problems, although considerable time is spent on them. Recent Supreme Court decisions receive special emphasis. Criminal Procedure does not deal with criminal tactics or with many of the special problems related to the introduction of evidence.

LAW5030 Business Organizations (Sp, Su, Fa) The study of business formations and the rights and duties of owners of partnerships and corporations. Emphasis is placed on the appropriate role of the legislature and the courts, and the problem faced by them in devising and administering a commerce regulation law.

LAW5032 Remedies (Irregular) (1-6) Covers equity jurisdiction and powers of courts of equity, injunctions, including adequacy.
This course provides instruction in practical aspects of client representation to the problems generated by family relationships. There is a large section on formation and dissolution of marriage. Substantive law is also given to paternity and legitimacy, obligations toward and of children, custody, adoption, guardianship, general property law as it is affected by family relationships, and divorce and custody in the federal system (focusing primarily on enforceability of divorces in one state by courts in another state). 

LAWW5083 First Amendment (Irregular) An intensive examination of the legal issues arising under the First Amendment to the United States Constitution, with an emphasis on basic free speech principles, and the dilemmas posed by interpretive conflicts between free exercise and establishment clauses. Prerequisite: LAW 5114.

LAWW5093 Social Practice Planning (Irregular) Combines elements of client sensitivity and law practice management. This course will satisfy the skills requirement.

LAWW510V Law: Study Abroad (Su) (1-6) Open to law students studying abroad in officially sanctioned programs.

LAWW5114 Constitutional Law (Irregular) An introduction to the basic principles of constitutional law and to current constitutional doctrines and problems. The primary focus will be on the structure of the federal system and on the rights of individuals under the Constitution as codified and protected in the Federal and State Constitutions. The unit will cover the First and Fourteenth Amendments.

LAWW5133 Real Estate Transactions (Sp, Su, Fa) Focuses on real estate transfer, real estate finance and real estate development. Issues relating to the sale of land and conveyances of real property, mortgages and the planning, financing, construction and marketing of modern real estate developments are treated.

LAWW5163 Administrative Law (Sp, Su, Fa) Course is constructed around Federal materials, but with some state references. Considers the origin and constitutional basis for the administrative process; executive and legislative controls on power; the judicial formulation and enforcement of administrative process (delegations, procedural and substantive due process, judicial assistance and enforcement and review of administrative decisions).

LAWW5178 Drafting Legal Documents (Sp, Su, Fa) A study of causes, fire, and life insurance. Major areas include the duty to defend; duty to settle within policy limits; the definition of what is covered under the policy; insurance marketing; insurable interests; the measures of recovery and defenses disputation of insurers; defenses such as fraud, concealment, and non-cooperation; and government regulation of insurance.

LAWW5183 Drafting Legal Documents (Irregular) This course will study and practice the principles applicable to drafting of non-litigation documents, such as contracts, wills, and legislation. These include organization and categorization of information, definitions, testing of substantive provisions for completeness and consequences, and choices and precision of language.

LAWW5203 Discrimination in Employment (Irregular) An examination of federal, constitutional, statutory, and administrative law governing the rights and responsibilities of employees and employers, including unemployment legislation, COBRA, EPPA, ERISA, FLSA, OSHA, USERRA, and WARN.

LAWW5203 Oil & Gas Regulation and Agreements (Irregular) This course is intended as a companion or follow-up course to the basic Oil and Gas course, and Oil & Gas is a pre-requisite to this course. The course will examine the basic principles of Oil & Gas including the nature of Oil & Gas. The course will also cover the basic legal principles involved in problems which have connections with two or more states requiring a choice of law, choice of forum, and the determination of damages in international transactions. 

LAWW5203 Arkansas Civil Practice (Irregular) This course builds on the basic understanding of civil procedure to create a detailed examination of civil procedure in Arkansas trial and appellate courts. Topics include civil and appellate procedure; the judiciary provisions of the Arkansas Constitution; state statutes dealing with jurisdiction and venue; the right to trial by jury following the merger of law and equity; and the enforcement of judgments. Differences between Arkansas and federal civil practice are also explored. Prerequisite: Civil Procedure I and II.

LAWW5203 Basic Evidence (Sp, Su, Fa) Study of the rules under which trials are conducted; the methods by which items of evidence are admitted or excluded; relevancy, real evidence, testimonial proof, and hearsay and its exceptions.

LAWW5203 Jurisprudence (Sp, Su, Fa) Study of the ideas and methods of law, regardless of particular questions that might be resolved by the law.

LAWW521V Moot Court (Sp, Su, Fa) (1-3) This course provides students with instruction in and, methods of planning and evaluation in, negotiating on behalf of clients. In addition to teaching the theory attached to these skills, the course provides students with practice in these areas through the use of live clients. In addition to teaching the theory attached to these skills, the course provides students with practice in these areas through the use of simulated client problems. Course satisfies skills requirement.

LAWW5243 Employment and Commercial Torts (Irregular) Course will explore the legal relationship between competition and intangible property. Covers the spectrum of private remedies for competitive wrongs. Course will examine laws relating to such business and commercial torts as unfair competition, misappropriation of trade secrets, trademark infringement, false advertising, etc. Course is designed for students planning to practice in the areas of commercial, corporate, business or intellectual property law.


LAWW5333 Negotiations (Irregular) This course provides students with instruction in, and methods of planning and evaluating their work in, negotiating on behalf of clients. In addition to teaching the theory attached to these skills, the course provides students with practice in these areas through the use of live clients. In addition to teaching the theory attached to these skills, the course provides students with practice in these areas through the use of simulated client problems. Course satisfies skills requirement.

LAWW5350 Federal Courts (Irregular) (1-3) Focus is on essential aspects of federal court procedure, the scope and limits of federal judicial power, and the underlying principles of federalism and separation of powers. Topics will include federal court jurisdiction, the power of Congress to limit that jurisdiction, Supreme Court review of state court judgments, and abstention and jurisdictional doctrines.

LAWW5363 Securities Regulation (Irregular) Regulation of the sale and issuance of and trading in stocks, bonds and other security negotiable instruments.

LAWW5364 Labor Law (Irregular) The right to organize; organization of labor; law of strikes; picketing; boycotts; collective bargaining; collective labor agreements and their enforcement; unfair labor practices by employers and by unions; the union member and his union; state labor relations legislation; the National Labor Relations Act and the Labor Management Relations Act. Not offered every year.

LAWW5394 Debtor-Creditor Relations (Sp, Su, Fa) Study of Article 9 of the Uniform Commercial Code and of the remedies of secured creditors.

LAWW5403 Substitute Disposition Resolution (Sp, Su, Fa) Deals with the alternative to formal litigation for resolving various types of disputes. The alternatives considered include negotiation, contract modification, mediation, "rent-a-judge," and other special procedures. Areas of application include contract and tort disputes, community problems, labor relations, and medical practice controversies. This course will study the skills requirement.

LAWW5405V Independent Legal Research (Sp, Su, Fa) (1-3) Independent legal research conducted under the supervision of faculty members. Ordinarily a student may not accumulate more than two semester hours of credit for Independent Legal Research. This cumulative maximum may be exceeded only by special permission of the dean, who in exceptional circumstances may approve a cumulative maximum of three semester hours of credit for Independent Legal Research.

LAWW5503V Federal Courts (Irregular) (1-3) Focus is on essential aspects of federal court procedure, the scope and limits of federal judicial power, and the underlying principles of federalism and separation of powers. Topics will include federal court jurisdiction, the power of Congress to limit that jurisdiction, Supreme Court review of state court judgments, and abstention and jurisdictional doctrines.

LAWW5504 Children and the Law (Irregular) Topics include children as legal persons, including minors’ right to expression under the First Amendment and their participation in decision-making in legal contexts; children’s rights and school authority, including truancy enforcement (TJA) and religious expression; foster care; termination of parental rights; and adoption.

LAWW5506 Advanced Evidence (Sp, Su, Fa) Deals with the evidence to prove that a claimant is entitled to recovery, including the presentation of expert testimony and the scientific evidence, organization of proof, burden of proof, presumptions, and the law of privileges.

LAWW5507 Conflict of Laws (Sp, Su, Fa) (2-3) Study of the legal principles involved in problems which have connections with two or more states requiring a choice of law, choice of forum, and the determination of damages in international transactions.
ing production from oil and gas operations, including today’s unconventional plays, such as the Fayetteville Shale Play in Central Arkansas. Prerequisite: LAWW 6143.

LAUW 6261 Estate Planning (Sp, Su, Fa) Study of the role of lawyers in the estate planning process, including the legal and tax consequences of transfers of property, including gifts, bequests, and trusts. Prerequisite: LAWW 6233.

LAUW 6313 Intellectual Property (Sp, Su, Fa) A survey of the basic principles and concepts of intellectual property law, including copyright, trademark, patent, and unfair competition law. Students are responsible for all aspects of the representation including, but not limited to, the selection of clients, the drafting of contracts, and the preparation of court documents.

LAUW 6323 Juvenile Justice Externship (Irregular) Externship for third year students. Interns shall report to and be under direct supervision of a judge of the federal district court, the bankruptcy court, or a court approved by the externship coordinator. Externs’ duties may be determined by the supervising judge and may include work on assigned cases, research, preparation of memoranda, and consultation with full-time law clerks.

LAUW 6332 Terrorism, National Security and Human Rights (Irregular) International law issues related to protecting the human rights of international organizations, research papers will satisfy upper-level writing requirement.

LAUW 6343 Conflict Resolution (Irregular) Designed to identify and apply processes. Class readings/plans, role playing, simulation exercises, and community service projects. Work with federal or state agencies, communications with constituents and other duties as assigned. Prerequisite: has earned a grade of C or higher in Professional Responsibility.

LAUW 6353 Corporate Counsel Externship (Irregular) Elective externship for second and third year students. Available only to a student who has successfully completed 48 hours of law credit and has earned a grade of C or higher in Professional Responsibility, the judge must approve the externship. Externs shall report to and be under direct supervision of the faculty supervisor. Externs must complete 16 weeks during the summer. For a two-credit externship, the average work load must be no less than 12 hours per week in the fall and spring, or 10 hours per week in the summer. For a two-credit externship, the average work load must be no less than 12 hours per week in the fall and spring, or 10 hours per week in the summer. Prerequisite: Faculty recommendation.

LAUW 6363 Bankruptcy (Sp, Su, Fa) Study of insolvency law, with particular emphasis on federal bankruptcy law.

LAUW 6373 Legal Clinic: Innocence Project (Irregular) This clinic works in conjunction with the Innocence Project, Arkansas to provide pro bono representation to individuals committed to the Arkansas Department of Corrections who can demonstrate their actual innocence.

LAUW 6473 Legal Clinic: Criminal Prosecution (Sp) Students in this course will have the opportunity to extend and refine their lawyering skills, knowledge of substantive law, and mastery of criminal procedure through prosecution of misdemeanors. Students are responsible for all aspects of the representation including, but not limited to, the selection of clients, the drafting of contracts, and the preparation of court documents.

LAUW 6543 American Legal History (Irregular) An examination of major themes in American legal history, with an emphasis on the origins and meaning of the United States Constitution. Topics covered include the history of American (colonial) and 19th Century developments in the law.

LAUW 6613 Bankruptcy (Sp, Su, Fa) Study of insolvency law, with particular emphasis on federal bankruptcy law.

LAUW 6643 Bankruptcy (SP) A study of the role of bankruptcy law in the resolution of business disputes. The course involves an introductory survey of topics in intellectual property law, with particular emphasis on federal bankruptcy law.

LAUW 6722 Terrorism, National Security and Human Rights (Irregular) International law issues related to protecting the human rights of international organizations, research papers will satisfy upper-level writing requirement.

LAUW 6723 Juvenile Justice Externship (Irregular) Juvenile Justice Externship is an elective externship for third year law students. Prerequisites for participating are: successful completion of the Criminal Defense Clinic or the General Practice Clinic; certification under Rule XV of the Arkansas Rules Governing Admission to the Bar; and the approval of the faculty member assigned to supervise the externship.

LAUW 6724 Taxation and Post-Conviction Remedies (Sp, Su, Fa) Law, theory, and practice of sentencing and post-conviction remedies.

LAUW 6763 Criminal Procedure II (Irregular) This course focuses on prosecuting crime. Principal topics include: the prosecutor’s decision to charge, the role of defense counsel, plea bargaining, and preliminary hearings, discovery, guilty pleas and plea bargaining, speedy trial, double jeopardy, trials and pretrial motions, sentencing and post-conviction remedies.

LAUW 6814 Corporate Counsel Externship (Irregular) Externs work with a supervising attorney in a corporate counsel’s office. In Fall and Spring semesters each extern works 16 hours per week (average minimum), and in Summer the extern shall work at least 20 hours per week during the 12-week term; keeps a journal, and meets at least 3 times with the faculty supervisor. Prerequisite: LAWW 4294, LAWW 5013 and approval of the faculty supervisor: Recommended: LAWW 6293.

LAUW 6822 Patent Law (Sp, Su, Fa) Study of the patent system of the United States, including conditions for a valid patent, the prosecution of the patent, and the litigation relating to patents. Not offered every year.

LAUW 6893 ADR in the Workplace (Irregular) Explores the practical as well as the legal problems presented by the use of alternative dispute resolution mechanisms. A survey of mediation, arbitration, and negotiation, with emphasis on their role in the resolution of disputes. The primary focus will be on the enforcement of collective bargaining agreements and individual employment contracts through arbitration, and the use of arbitration to resolve collective disputes such as claims for back pay.

Course Descriptions
LAW6913 Environmental Law (Sp, Su, Fa) Devoted primarily to the legal problems related to the environment. Inclusion of C or better, or environmental impact in public and private decision making.

LAW6923 Legal Clinic (Civil Practice) (Sp, Su, Fa) Students develop skills by working with actual clients in nearby civil courtrooms. Students counsel clients, counsel them, and represent them in cases.

LAW6933 Legal Clinic (Criminal Defense) (Sp, Su, Fa) Students develop skills by representing actual clients charged with misdemeanors in Washington County and nearby counties and clients charged with felonies and misdemeanors in Washington County Juvenile Court. Students interview clients, counsel them, negotiate, and litigate. The Legal Clinic faculty supervise and review the students’ work, and provide personal feedback to individual students.

LAW6973 Advanced Clinic (Irregular) Advanced Clinic is designed to allow students to gain more in depth experience in an area of specialized and general practice clinics. Students who have successfully completed the Civil or Transactional may elect to take the Advanced Clinic for an additional 3 credits during a subsequent semester. Students enrolled in the Civil Clinic may elect an additional course for an additional 3 credits during the same summer session in which they are enrolled. Students may take only one Advanced Clinic.

LAW7003 Environmental Justice Seminar (Sp, Su, Fa) Examines procedural and substantive law in the context of the distinctive goals, structure, and procedure of the Juvenile Court. Special attention is given to alternative ways of dealing with two categories of juveniles, i.e., status offenders who are within the jurisdiction of the court although not accused of criminal conduct, and youthful offenders who commit serious crimes.

LAW7093 Externship: Federal Public Defender (Irregu- lar) Externship for federal public defender students for three semester hours of ungraded credit. Duties shall be determined by the supervising attorney and may include work on assigned cases, appearances, preparation of research memoranda, preparation of trial motions, consultation with other employees of the Office of the Federal Public Defender and other projects as assigned. Each extern works an average of 12 hours minimum per week during the fall or spring semester or 15 hours per week during the summer semester, keeps a journal and meets at least 3 times with the faculty supervisor.

LAW7090V Sports Law (Irregular) (2-3) The major topics covered include contracts, torts, issues involving participants, institutions, physicians and equipment manufacturers, criminal liability, drug testing, constitutional and related issues dealing with sports associations and Title 9 and other civil rights issues. Other relevant topics may also be covered if possible.

LAW7072 Advanced Mediation Clinic (Irregular) Students will comediate civil cases referred by Courts and agencies. Students will work with experienced mediators and the mediation clinic supervisor, who will review their performances on an individual basis. Students may produce educational programs for various groups. Class discussions will focus on current mediation issues and problems. Prerequisite: Mediation in Practice.

LAW7073 Mediation in Practice (Irregular) This three-credit course will train students to mediate disputes assigned to the Northwest Arkansas Dependency-Neglect/Families In Need of Services Mediation Project by the juvenile court. In the first five weeks of the semester, students will be introduced to basic mediation theory, procedures, and ethical constraints; communication techniques; juvenile law; and operation of the child welfare system in Arkansas. This training will include lectures, discussion, and simulation exercises. In the remaining weeks of the semester, students will receive additional information and offer their services to and participate in the mediation of actual cases assigned to the Project.

LAW7243 Health Law (Sp, Su, Fa) An examination of the role of health care laws and regulations in access to and quality of care, and the quality of services provided by the healthcare industry.

LAW7342 Law and the Internet (Irregular) This is a survey course. Students will study laws associated with doing busi-
component of the ACT exam, or a score of at least 600 on the math component of the SAT. (Same as MATH 2035)

MATH2803D Linear Differential Equations: An Introduction to Mathematics for Scientists and Engineers (Sp, Fa) First and second order ordinary differential equations. Three hours of lecture and two hours of drill (recitation) per week. Corequisite: Drill component. Prerequisite: MATH 2564 with a grade of C or better (Same as CVEG 3133, MATH 2584)

MATH2803 Discrete Mathematics (Sp, Su, Fa) Introduction to discrete mathematics, count of algorithms, counting methods, graph theory, trees, and Boolean algebra. Prerequisite: MATH 2564 with a grade of C or better or the equivalent. (Same as Math 2803C) Corequisite: Drill component. Prerequisite: MATH 2564 with a grade of C or better or the equivalent. (Same as Math 2803)

MATH2701 Survey of Higher Math (Sp) This course covers topics in basic logic, methods of proof, sets, functions, and operations. Prerequisite: MATH 2564 with a grade of C or better or the equivalent. (Same as MATH 2701)

MATH2803 Introduction to Mathematical Proof (Sp, Fa) Introduction to methods of mathematical proof, with applications. Corequisite: MATH 2564.

MATH3083 Linear Algebra (Sp, Su, Fa) Systems of linear equations, vector spaces, linear transformations, matrices, and determinants. Only one of MATH 3083 and MATH 3083 will count for credit. Prerequisite: MATH 2564 or MATH 2043 with a grade of C or better.

MATH3093 Abstract Linear Algebra (Sp, Fa) A proof-based course on vector spaces, linear transformations, matrices, determinants, eigenvalues, and eigenvectors. Recommended for mathematics majors only. Only one of MATH 3083 and MATH 3093 may be counted for credit. Pre- or Corequisite: MATH 2564.

MATH2564C Honors Calculus I (Sp, Su) Topics in analytic geometry and calculus presented in a rigorous manner suitable for an honors student. Students may not receive credit for both MATH 2564 and MATH 2564C. Prerequisite: Honors standing or departmental consent; and a score of at least 30 on the math component of the ACT exam, or a score of at least 680 on the math component of the SAT exam.

MATH2564 Honors Calculus I (Sp, Su) Functions of one variable, applications of the derivative, introduction of the integral, and applications. Credit will be allowed for only one of MATH 2564 and MATH 2564C. Prerequisite: MATH 1213, MATH 1214, MATH 1284, MATH 2033, MATH 2043, MATH 2183 or MATH 2564.

MATH 5053 Geometry with Connections to School Mathematics (Irregular) Includes: Plane and solid geometry from an advanced and historical perspective, the interplay of ideas within the real number system, systems and sequences, and the Bolzano-Weierstrass Theorem, limits and continuity, the Intermediate Value Theorem, Rolle’s Theorem, differentiation, the Mean Value Theorem and its applications, antiderivatives, and the Fundamental Theorem of Calculus. Prerequisites: MATH 3083 and MATH 3093 with a grade of C or better.

MATH 5013 Abstract Algebra with Connections to School Mathematics (Irregular) Includes: Basic facts about infinite sets. Prerequisite: MATH 2603 or MATH 2701.

MATH295VH Mathematics Seminar (Irregular) May be repeated for up to 12 hours of degree credit. Prerequisite: Departmental consent. May be repeated for up to 12 hours of degree credit.

MATH499VH Research Seminar in Mathematics (Irregular) May be repeated for up to 12 hours of degree credit. Prerequisite: Departmental consent. May be repeated for up to 12 hours of degree credit.

MATH 5043 Mathematics Major Seminar (Irregular) Weekly seminars on topics of historical or interdisciplinary interest, designed to address students’ mathematical knowledge, identities, and dispositions. Student presentations play a part. Also serves as a forum for sharing information about career opportunities and preparation for employment. Prerequisite: Senior standing and a mathematics major.

MATH498VH Senior Thesis (Sp, Su, Fa) (1-6)

MATH499VH Research Research in Mathematics (Irregular) (1-3) Current research interests in mathematics, at an advanced undergraduate or beginning graduate level. Prerequisite: Departmental consent. May be repeated for up to 12 hours of degree credit.

MATH499VH Honors Research Research in Mathematics (Irregular) (1-3) Current research interests in mathematics, at an advanced undergraduate or beginning graduate level. Prerequisite: Departmental consent. May be repeated for up to 12 hours of degree credit.

MATH5001 Connections to School Mathematics (Irregular) This course is a supplement to any graduate course in statistics, algebra, analysis, or geometry. The purpose is to connect the content of the graduate course to school mathematics. Prerequisite: Departmental consent. May be repeated for up to 6 hours of degree credit.

MATH5013 Abstract Algebra with Connections to School Mathematics (Irregular) Basic structures of abstract algebra (groups, rings, fields, modules and vector spaces) with emphasis on rings and fields as generalizations of the ring of integers and field of rational numbers. Degree credit will not be awarded for both MATH 4131 (or MATH 5123) plus MATH 5013, or MATH 5013 plus MATH 5013. Prerequisite: Graduate standing or departmental consent.

MATH5023 Geometry with Connections to School Mathematics (Odd years, Fa) Geometry from an advanced
perspective including conformity to the Common Core State Standards for Mathematics. Study will include historical development and the nature of fundamental concepts, and the development of a three-dimensional space. Prerequisite: Graduate standing.

MATH5033 Advanced Calculus with Connections to School Mathematics Teaching (irregular) Rigorous development of calculus and its applications. Prerequisites: MATH 5053 and MATH 5033.

MATH507V Professional Development for Secondary Mathematics Teaching (irregular) (1-3) A teacher improvement program for secondary mathematics teachers. This course will provide in-service training in the advanced practice of mathematics teaching. Prerequisite: Graduate standing.

MATH510V Mathematical Seminar (Sp, Fa) (1-3) Development of student interests in mathematics. May be repeated for credit.

MATH519V Topics in Algebra (Sp, Su, Fa) (1-6) Departmental consent.

MATH520V Accounting and Financial Management (Fa) (2-3) Corporate finance, the statement of financial position, the income statement, the statement of cash flows, financial analysis, and capital budgeting. Prerequisite: MATH 5113, and graduate standing in mathematics or statistics, or departmental consent.

MATH5303 Ordinary Differential Equations (Fa) Existence, uniqueness, stability, qualitative behavior, and numerical solutions. Prerequisite: MATH 2584 and MATH 4513, and graduate standing in mathematics or statistics, or departmental consent.

MATH5313 Partial Differential Equations (Sp) Classification, boundary value problems, applications, and numerical solutions. Prerequisite: MATH 3423 and MATH 4513, and graduate standing in mathematics or statistics, or departmental consent.

MATH5453 Functional Analysis I (Odd years, Sp) Banach Spaces, Hilbert Spaces, operator theory, compact operators, dual spaces, and applications. Prerequisite: MATH 5403 and graduate standing in mathematics or statistics, or departmental consent.

MATH5503 Theory of Functions of a Real Variable I (Fa) Real number system, Lebesgue measure, Lebesgue integral, convergence theorems, differentiation of monotone functions, absolute continuity and the fundamental theorem of calculus, L^p spaces, Holder and Minkowski inequalities, and bounded linear functionals on the L^p spaces. Prerequisite: MATH 4523, and graduate standing in mathematics or statistics, or departmental consent.

MATH5513 Theory of Functions of a Real Variable II (Sp) Measure and integration on abstract measure spaces, signed measures, Hahn decomposition, Radon-Nikodym theorem, Lebesgue decomposition, absolutely continuous functions and their extensions, product measures, and Fubini's theorem. Prerequisite: MATH 5503, and graduate standing in mathematics or statistics, or departmental consent.

MATH5523 Theory of Functions of a Complex Variable I (Fa) Complex numbers, analytic functions, power series, complex integration, Cauchy's Theorem and integral formula, maximum principle, singularities, Laurent series, and Mobius maps. Prerequisite: MATH 5523, and graduate standing in mathematics or statistics, or departmental consent.

MATH5533 Theory of Functions of a Complex Variable II (Sp) Riemann Mapping Theorem, analytic continuation, harmonic functions, and entire functions. Prerequisite: MATH 5503, and graduate standing in mathematics or statistics, or departmental consent.

MATH5537 Topics of Topology (Sp) Metric and general topological spaces, separation axioms, Urysohn's lemma, Tietze extension theorem, connectedness, compactness, and the Tychonoff theorem. Prerequisite: MATH 4513, and graduate standing in mathematics or statistics, or departmental consent.

MATH5571 Algebraic Topology (Fa) Homotopy, singular and relative homology, excision theorem, the Mayer-Vietoris sequence. Betti numbers, and the Euler characteristic. Prerequisite: MATH 5703, and graduate standing in mathematics or statistics, or departmental consent.

MATH601V Directed Readings (irregular) (1-4) Prerequisite: Departmental consent.

MATH610V Topics in Algebra (Sp, Su, Fa) (1-4) Current research interests in algebra. May be repeated for credit. Prerequisite: Graduate standing in mathematics or statistics, or departmental consent.

MATH650V Analysis in Space (Sp, Su, Fa) (1-4) Current research interests in analysis. May be repeated for credit. Prerequisite: Graduate standing in mathematics or statistics, or departmental consent.

MATH665V Topics in Topology (Sp, Su, Fa) (1-4) Current research interest in topology. May be repeated for credit. Prerequisite: Graduate standing in mathematics or statistics, or departmental consent.

MATH700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Doctoral candidacy in mathematics.


MEEG2013 Dynamics (Sp, Su, Fa) Kinematics and kinetics of particle and of rigid bodies; work and energy; impulse and momentum, and special topics. Corequisite: Drill component.

MEEG2113 Introduction to Materials (Sp, Fa) Introduction to the fundamental atomic approach. The materials of interest are: metals, polymers, ceramics, and composites. The interactive relationship between structure, properties, and processing of materials will be emphasized. For various engineering applications. Prerequisite: Senior standing in Mechanical Engineering. Corequisite: MEEG 2113.

MEEG2203 Introduction to Mechanical Engineering (Sp, Su) Course introduces students to materials of engineering. Prerequisite: MATH 1133. Corequisite: MEEG 2203.

MEEG2303 Introduction to Materials (Sp, Fa) A study of chemical, physical, and electrical properties of materials using fundamental atomic approach. The materials of interest are: metals, polymers, ceramics, and composites. The interactive relationship between structure, properties, and processing of materials will be emphasized. For various engineering applications. Prerequisite: Senior standing in Mechanical Engineering. Corequisite: MEEG 2303.

MEEG2403 Thermodynamics (Sp, Su, Fa) A study of the first and 2nd laws of thermodynamics. Availability of energy, properties of liquids, gases, and vapors; nonflow and flow processes. Recitation 3 hours per week and drill 1 hour per week.

MEEG2503 Statics (Sp, Fa) Equilibrium, forces, and stress in a plane and in space; analysis of structures, friction, centroids, moments of inertia, and virtual work method. Analysis of beams and structures. Prerequisite: MATH 1133.

MEEG2513 Introduction to Materials (Sp, Fa) A study of the fundamental atomic approach. The materials of interest are: metals, polymers, ceramics, and composites. The interactive relationship between structure, properties, and processing of materials will be emphasized. For various engineering applications. Prerequisite: Senior standing in Mechanical Engineering. Corequisite: MEEG 2513.

MEEG2523 Statics (Sp, Su, Fa) Equilibrium, forces, and stress in a plane and in space; analysis of structures, friction, centroids, moments of inertia, and virtual work method. Analysis of beams and structures. Prerequisite: MATH 1133.

MEEG2533 Introduction to Materials (Sp, Fa) A study of the fundamental atomic approach. The materials of interest are: metals, polymers, ceramics, and composites. The interactive relationship between structure, properties, and processing of materials will be emphasized. For various engineering applications. Prerequisite: Senior standing in Mechanical Engineering. Corequisite: MEEG 2533.

MEEG2543 Introduction to Materials (Sp, Su, Fa) A study of the fundamental atomic approach. The materials of interest are: metals, polymers, ceramics, and composites. The interactive relationship between structure, properties, and processing of materials will be emphasized. For various engineering applications. Prerequisite: Senior standing in Mechanical Engineering. Corequisite: MEEG 2543.

MEEG2602 Introduction to the Value Chain (Fa) An introduction to the value chain concept, the underlying framework of the Value-based Management (VBM) approach, and the primary value chain activities of inbound logistics, operations, outbound logistics, marketing and sales, and service, as well as the support activities of procurement, technology development, human resource management, and firm infrastructure.

MEEG2613 Financial Accounting (Fa) This course covers the preparation and use of financial statements of publicly held corporations in the United States. Topics include the theory and rules used in financial statement preparation, a comparison of the United States rules to International Accounting Standards, the analysis of financial statements to provide inter-company and industry comparisons and information about the financial status and health of non-profit and for-profit organizations.

MEEG2773 China Business Law, Regulations, and Ethics (irregular) Business law in China that is relevant to managers; Chinese regulations particularly relevant to consumer products and retail; business ethics in China.

MEEG519V Capstone Project Definition (irregular) (1-3) Identification of business processes for capstone project, including: estimation of the size of the opportunity, identification of key decisions, and proposal write up.

MEEG529V Capstone Project Plan (irregular) (1-3) Second estimation of the size of the project benefit, identification of how the current process operates, assumptions identified, data collected, analyzed, tested, investigated, performance metrics, and Gantt chart for project.

MEEG593V Capstone Project Management (irregular) (1-3) Management of the project, including frequent updates, milestone documentation of progress to overcome challenges, and creation of an implementation plan.

MEEG594V Capstone Project Final Deliverables (irregular) (1-3) Write up of entire capstone project, presentation of project, creation of value, implementation plan, performance metrics, and change management plan.
MEEG3113 Machine Dynamics and Control (Su, Fa) The principles of kinematics and kinetics for rigid body motion from dynamics are applied to machine components with the goal being to determine their impact on machine behavior and performance. The time varying forces created by the movement of machine components are used to describe the machinery. Kinematic and dynamic equations of machines are introduced with the goal of describing how these motions might be reduced or eliminated. Corequisite: Drill component. Prerequisite: MEEG 2103 and MATH 2584.

MEEG3202L Mechanical Engineering Laboratory I (Sp, Fa) Introduction to measurement, uncertainty, data acquisition, and instrumentation with an emphasis in materials and manufacturing. Corequisite: Drill component. Pre or Corequisite: MEEG3202 or MEEG3203. Designed to provide laboratory experience in the specialized area of measurement processes. Prerequisite: MEEG 2312L Mechanical Engineering Laboratory II (Sp, Fa) Design and implementation of measurements, fabrication processes, data acquisition, and analysis with emphasis in mechanical design and steady-state systems Corequisite: Drill component. Prerequisite: ELEG 3903, MEEG 3202L, MEEG 3503 and MEEG 3113.

MEEG3303 Mechanics of Fluids (Su, Fa) A study of fluids including properties, pressure forces, and fluid flow utilizing conservation of mass, conservation of energy, and momentum principles. Pre- or Corequisite: MATH 2584. Prerequisite: MEEG 2403.


MEEG4403 Composite Materials: Analysis and Design (Irregular) Study of composite materials with emphasis on the behavior of composites in mechanical, thermal, and environmental conditions. Topics include macro- and micro-mechanical analysis of composites, failure analysis, and manufacturing technology. Corequisite: MEEG 3503 or graduate standing. Prerequisite: MEEG 2013.

MEEG4104 Machine Element Design (Sp, Su) Select design components commonly used in modern machines, principally for energy transmission. Students will be required to design a small system and present their design to the class. Prerequisite: MEEG 3013. Pre- or Corequisite: MEEG 3113.

MEEG4104H Honors Machine Element Design (Sp, Su) Select design components commonly used in modern machines, principally for energy transmission. Students will be required to design a small system and present their design to the class. Advanced project required of honors students. Advanced project required. Prerequisite: MEEG 3013. Pre- or Corequisite: MEEG 3113.

MEEG4123 Finite Element Methods I (Irregular) Introduction to the use of the finite element method in mechanical engineering analysis and design. Use of commercial software to solve three-dimensional problems. Pre- or Corequisite: MEEG 3013 and MEEG 4413.

MEEG4131 Creative Project Design I (Sp, Fa) Students will select a capstone design project, and each student group will prepare a formal written proposal on their project for presentation to a panel of judges. This project group will be carried to completion in MEEG 4133. Pre- or Corequisite: MEEG 4104 or MEEG 4483. Prerequisite: Senior Standing.

MEEG4132 Professional Engineering Practices (Sp, Fa) Design proposal preparation, design codes, professional ethics, economic, and engineering economics, and the role of the engineer in society. Pre- or Corequisite: MEEG 4104 or MEEG 4483. Prerequisite: Senior Standing.

MEEG4133 Creative Project Design II (Sp, Fa) Student groups will present their final capstone design proposal to a faculty panel and then carry out their project to completion. Each student group will be required to prepare their final project report to a panel of judges. Prerequisite: MEEG 4131.

MEEG4202L Mechanical Engineering Laboratory III (Sp, Fa) Apparent methods and techniques to mechanical design problems with an emphasis in thermal systems. Corequisite: Drill component. Pre or Corequisite: MEEG 4483. Designed to provide laboratory experience in the specialized area of measurement processes. Prerequisite: MEEG 3212L and MEEG 4104.

MEEG4403H Thermal Mechanical Systems (Irregular) Mathematical modeling for feedback control of dynamic mechanical systems with design techniques using LaPlace transforms, state variables, root locus, frequency analysis, and control design and operations. Prerequisite: MEEG 2013 and MEEG 4203 or consent of instructor.


MEEG4903H Honors Mechanical Engineering Research (Sp, Fa) Independent research for mechanical engineering projects. Prerequisite: Student must be enrolled in Honors Program.

MEEG4919V Special Projects (Sp, Su, Fa) (1-6) May be repeated for up to 6 hours of degree credit.

MEEG5253 Bio-Mems (Sp) Introduction: microfabrication technology, bio/abio hybrid integration of micro-fabrication technology, and various biomedical and biological applications taken from solid and fluid mechanics, heat transfer, and acoustics. Emphasis is placed on the FE methods to simulate the behavior of micro systems. Computation of the FE methods and digital computer applications undertaken. Prerequisite: MEEG 3113 and MEEG 4103 and graduate standing.

MEEG5301 Introduction to Micro Electro Mechanical Systems (Irregular) Fundament concepts of both analytical and experimental modal analysis methods are examined and applied to the study of complex structural systems. Computational aspects of these problems and digital computer applications undertaken with experimental verification. Prerequisite: MEEG 5103 and graduate standing.

MEEG5513 Finite Elements Method II (Irregular) Development and application of finite element (FE) methods used to solve transient and two-dimensional boundary value problems. Applications are taken from fluid mechanics, heat transfer, and acoustics. Emphasis is placed on the FE methods to simulate the behavior of micro systems. Computation of the FE methods and digital computer applications undertaken. Prerequisite: MEEG 5103 and graduate standing.

MEEG5203 Robot Modeling and Simulation (Sp) This is a graduate level course in Robotics dealing with the behavioral study of robots. Topics covered in this course will include but not be limited to: modeling and simulation of robots, rigid motions and homogeneous transformation, forward/ inverse kinematics of robots, velocity kinematics, path and trajectory planning, robot dynamics, joint control, PD/PID control, and various commercial software manuals, and to encourage responsible use and interpretation of FE analysis. Prerequisite: MEEG 4123 and graduate standing or consent.

MEEG5514 Advanced Machine Design (Su) Application of advanced topics such as probability theory, fracture mechanics, and computer methods to the design and analysis of complex mechanical systems. Prerequisite: MEEG 4104 and graduate standing.

MEEG5253 Bio-Mems (Sp) Topics include the fundamental principles of microfluidics, Navier-Stokes Equation, bio/abio interfacing technology, bio/abio hybrid integration of micro-fabrication technology, and various biomedical and biological problems that can be addressed with microfabrication technology and the engineering challenges associated with it. Lecture 3 hours per week. Prerequisite: MEEG 3503 or CVEG 3213 or CHEG 2133. (Same as BENG 2523).

MEEG5263 Introduction to Micro Electro Mechanical Systems (Fa) A study of mechanics and devices on the micro scale. Course topics will include: introduction to micro scales, fundamentals of microfabrication, surface and bulk micromechanics, device packaging, device reliability, examples of micro sensors and actuators. Recitation 3 hours per week.

MEEG5273 Electronic Packaging (Irregular) An introductory course covering fundamental concepts in single-chip to multiprocessor, including materials, electrical design, thermal design, mechanical design, package modeling and simulation, processing considerations, reliability, and testing. Credit cannot be earned for MEEG 5273 and CEEG 3273 or MEEG 3273 or CEEG 3393 and MATH 2584. (Same as ELEG 5273).

MEEG5303 Physical Metallurgy (Irregular) Physical and chemical properties of solids and the application of materials
Course Descriptions

in commerce. Prerequisite: MEEG 2303.

MEEG5323 Physical and Chemical Vapor Deposition Processes (Irregular) A study of chemical vapor deposition processes. Shows the materials science of thin films, applications, and processes in microelectronics, tribology, corrosion, bio- and nano-materials. Prerequisite: Graduate standing in Engineering or consent of instructor. MEEG5431 Advanced Thermodynamics (Sp, Su) (1-3) A study of the fundamentals of thermodynamics and its applications. Prerequisite: Graduate standing.

MEEG5433 Computational Material Science (Irregular) This course provides students with an overview of different modeling techniques in material science. Applications will be presented on a broad range of modeling techniques including atomistic simulation methods, Monte Carlo techniques, molecular mechanics, and molecular dynamics. Prerequisite: Graduate standing.

MEEG5440 Advanced Thermodynamics (Sp) An in-depth review of the fundamentals and applications of thermodynamics, including the availability analysis, combination, and equilibrium, with an introduction to quantum mechanics and statistical thermodynamics. Prerequisite: Graduate standing in Engineering or consent of instructor. MEEG5450 Advanced Fluid Dynamics (Irregular) A study of fluid behavior in complex flows. Prerequisites: MEEG 2403 and MATH 2574.

MEEG5453 Combustion (Irregular) Introduction to combustion of solid, liquid, and gaseous fuels. Equilibrium and kinetics of hydrocarbon oxidation, laminar and turbulent flames, premixed and non-premixed combustion processes, ignition, quenching, stability, emissions and diagnostics. Prerequisite: Graduate standing in Engineering or consent of instructor. MEEG5454 Advanced Heat Transfer (Fa) More in-depth study of topics covered in MEEG 4413, Heat Transfer, and coverage of some additional topics. Prerequisite: MEEG 4413 or CHEG 3143 or equivalent.

MEEG5473 Radiation Heat Transfer (Even years, Su) Special analysis, radiant exchange in gray and non-gray enclosures, gas radiation, and multi-mode heat transfer. Prerequisite: MEEG 5453 or equivalent.

MEEG5480 Fluid Dynamics I (Sp) A basic survey of the characteristics of fluid flow under a variety of conditions with examples. Begins with a derivation of the Navier-Stokes equations and an evaluation of the dimensionless groups found in fluid dynamics. Topics to be covered include viscous laminar and turbulent boundary layers, jets and wakes, Stokes flow, inviscid flows with and without free surfaces and turbulence. Prerequisite: MEEG 3503 and MATH 2584.

MEEG5493 Aerodynamics (Irregular) A study of external-flow fluid mechanics applied to Aerodynamics. Topics include integral and differential forms of the basic fluid equations (continuity, momentum, and energy), potential flow, and supercritical flow. Prerequisite: MEEG 3503 and MEEG 4503.

MEEG5733 Advanced Numerical Methods (Irregular) Numerical methods for the solution of linear and non-linear ordinary and partial differential equations; initial and boundary value problems; one-step and multi-step methods; predominately finite difference but also finite element and control volume techniques; and computer applications. Graduate standing in Engineering or consent of instructor.

MEEG590V Research (Sp, Su, Fa) (1-6) Fundamental or applied research. Prerequisite: Graduate standing.

MEEG591V Special Problems (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

MEEG600V Master’s Thesis (Sp, Su, Fa) (1-6) Prerequisite: Graduate standing.

MEEG6334 Graduate Seminar (Sp, Fa) A periodic seminar devoted to mechanical engineering research topics. Course includes letter grades A, B, C, D, and F as well as CR.

MEEG700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy.

Microelectronics Photronics (MEPH)

MEPH1488V MicroEOP Undergraduate Research (Sp, Fa) (1-3) Special research topics associated with undergraduates enrolled in Microelectronics-Photonics minor program, or by special permission to undergraduate students engaged in research with microEOP faculty members. May be repeated for up to 6 hours of degree credit.

MEPH3833 Research Commercialization and Product Development (Sp) This course examines commercialization through analysis of IP, technology space, market space, manufacturability, financials, and business plans. Entrepreneurial behaviors and product development within large companies and startups will be examined. A case study using current UA faculty member’s research commercialization effort will be developed. Prerequisite: Graduate Standing.

MEPH4513 Applied Research in External Technical Organizations (Sp, Su) This course focuses on graduate level research effort while working at an external technical organization’s site. Requires a final report of style and quality suitable for journal submission. This course is available to MEEG 588V External Internship. May be repeated for up to 6 hours of degree credit.

MEPH5523 Applied On-Campus Collaborative Research with External Technical Organizations (Sp, Fa) The one-semester seminar focuses on graduate level on-campus research effort performed in collaboration with an external technical organization. Requires a final report of style and quality suitable for journal submission. This course is available only to Professionals Path M.S. microEOP students. May be repeated for up to 6 hours of degree credit.

MEPH555V Internship in External Technical Organization (Sp, Fa) (1-3) Used to document a microEOP grad student’s research experience in an external technical organization for a minimum duration of six weeks (6-9 weeks=one hour, 10-12 weeks=two hours, and 13-15 weeks=three hours). It may not be used to meet the research requirements of a M.S. degree. Prerequisite: Graduate standing.

MEPH5611 Research Communication Seminar of MS Students (Sp, Fa) This course serves as a forum for MS students to develop oral presentation skills and to exchange research information about their work. Topics will vary from area of micro to nanoscale materials, processing, and devices, with research management and planning also being addressed. Prerequisite: Graduate standing.

MEPH5713 Advanced Nanomaterials Chemistry (Irregular) Science and engineering graduates are using more nanomaterials, and modern industry demands that its scientists and engineers have materials chemistry knowledge. Materials from the micro to nanoscale will be examined in this course from the perspective of fundamental chemistry principles to build a picture of tomorrow’s materials. May be repeated for up to 3 hours of degree credit.

MEPH5733 Fabrication at the Nanoscale (Irregular) This hands-on lab course will cover the disciplines needed to make active electronic and photonic devices utilizing nanoscale structures and fabrication techniques presently used in research and industry. Prerequisite: Graduate standing and permission of the instructor.

MEPH5742 Transmission Electron Microscopy Theory and Operation (Irregular) This new laboratory course will introduce students to practical electron microscopy and to the operation of the Titan ST/TEM for examination of sub-angstrom examination of materials. Students will learn how to conduct a TEM test, how to operate the TEM, and how to extract and interpret useful information. Prerequisite: Graduate standing.

MEPH5811 1st Year Operations Seminar - Infrastructure Management (Fa) Weekly seminar for 1st year Microelectronics-Photonics graduate students to discuss issues that affect professional performance in technology-centered organizations. The discussions will focus on issues that affect personnel management, team building and structures, and may include examples from current events. Prerequisite: Graduate standing.

MEPH588V Special Problems in Microelectronics-Photonics (Irregular) (1-4) Consideration of current microelectronics-photonic topics not covered in other courses. One section will be created for each topic only after a syllabus is submitted to the Office of Graduate Studies. May be repeated for up to 9 hours of degree credit.

MEPH589V Special Problems in Microelectronics-Photonics (Irregular) (1-3) Opportunity for individual study of advanced subjects related to a graduate degree in Microelectronics-Photonics to suit individual requirements. One section will be created for each student only after a syllabus is submitted to the office of the supervising faculty member. May be repeated for up to 6 hours of degree credit.

MEPH9911 1st Year Operations Seminar - Personnel Management (Sp) Weekly seminar for 1st year Microelectronics-Photonics graduate students to discuss issues that increase professional performance in technology-centered organizations. The discussions will focus on issues that affect personnel management, team building and structures, and may include examples from current events. Prerequisite: Graduate standing.

MEPH991T MEEP TRANSFER COURSE

MEEP6023 Law and Public Policy (Fa) This course focuses on the legal aspects of public policy, with emphasis on the regulatory processes and legislation associated with the laws affecting the microelectronics and photonics industries. Prerequisite: MEEP6341 Introduction to Middle East Studies (Sp, Fa).

MEEP6113 Introduction to Middle East Studies (Sp, Fa) (1) Focus on the complex issues that affect management and leadership effectiveness and efficiency, and may include examples from current events. Prerequisite: Graduate standing.

MEEP6991 2nd Year Operations Seminar Advanced Management and Leadership (Sp) Weekly seminar for 2nd year Microelectronics-Photonics graduate students to discuss issues that increase professional performance in technology-centered organizations. The discussions will focus on the complex issues that affect management and leadership effectiveness and efficiency, and may include examples from current events. Prerequisite: Graduate standing.

Middle East Studies (MEST)

MEST2013 Islam in History, Practice and Experience (Irregular) This course introduces Islam as a global religion and world civilization, including study of the Qur’an, prophet Muhammad, life, and world civilization. Students will be introduced to a variety of disciplinary approaches to the study of the geo-cultural region, including history, politics, arts and literature, religions and cultures, social geography, and economics.

MEST 2023 Special Topics in Middle East Studies (Irregular) (1-9) Courses in lecture or colloquium format to be offered in a variety of disciplines relating to the history, culture, politics, geography, languages, arts, and religions of the Middle
elements of business as it practiced in selected nations and diverse cultures.

MGMT4934 Organizational Staffing (Sp, Fa) In-depth study of theoretical, legal, methodological, and substantive issues related to selection, performance appraisal, and development of employees. Students participate in individual and group projects, developing practical skills related to staffing. Prerequisite: WCOB 1033.

MGMT4953 Organizational Rewards and Compensation (Sp, Fa) Develops an understanding of reward systems theory and its application to the design of compensation systems. Provides theoretical and legal background and practical applications for the use of reward systems in attracting, motivating, and retaining employees. Prerequisite: WCOB 1033.

MGMT4996 Admissions to the M.B.A. Program (Irregular) Admissions to the M.B.A. Program. Prerequisite: WCOB 2033.

MGMT5313 Strategic Management (Sp) Introduction to the fundamental business concepts an entrepreneur needs to know to evaluate and launch a successful new venture. Topic areas include recruitment, selection, motivation and management of employees, market analysis and the marketing mix, resources and finance, risks and rewards, and legal issues related to the management of new ventures. Prerequisite: Senior standing. May be repeated for credit.

MGMT5363 Innovation & Creativity (Sp) This class will provide a framework for developing, assessing and implementing innovations in start-ups and established businesses. Focus is on creative decision-making, strategic planning, marketing, prototyping, managing resources, and innovation and implementation. Aimed at entrepreneurs, brand managers, and managers in industries where innovation is a key strategy.

MGMT5573 Internship (Irregular) Formalized on-the-job work experience in a business setting. Internship is open to juniors and seniors with a grade point average of 3.0 or above. Internship may be repeated for up to 9 hours of degree credit.

MGMT5993 Entrepreneurship Practicum (Sp, Su, Fa) Hands-on management of an actual on-going business. Students will gain experience working in, making decisions about, and managing a business. Topics covered include accounting, economics, finance, information systems, law, logistics, management, and marketing. Entrance by application only. May be repeated for up to 6 hours of degree credit.

MGMT6113 Seminar in Organizational Behavior (Irregular) This Ph.D.-level seminar presents an overview and introduction to organizational behavior. Prerequisites: WCOB 2033 and MGMT 3636V. Special Problems in Management (Sp, Fa) (1-6) Individual reading and research. May be repeated for up to 6 hours of degree credit.

MGMT6313 Seminar in Managerial Economics (Sp) Provides theoretical and legal background and practical applications for the use of reward systems in attracting, motivating, and retaining employees. Prerequisite: WCOB 1033.

MGMT6996 Admissions to the Ph.D. Program (Irregular) Admissions to the Ph.D. Program. Prerequisite: WCOB 2033.

MGMT7133 Seminar in Strategy Research (Irregular) This Ph.D.-level seminar presents an overview and introduction to strategic management. Prerequisites: WCOB 2033 and MGMT 3636V. Special Problems in Management (Sp, Fa) (1-6) Individual reading and research. May be repeated for up to 6 hours of degree credit.

MILS1001 Rappelling, Outdoor Field Craft and Leadership Development (Sp) Involves simulation of various small group small unit leadership, rappelling, basic map reading, water safety and first aid. Introduction to safe use of a rifle and basic marksmanship. Introduction to organization, values, and role of the Army. Classroom 1 hour per week. Lab 2 hours per week. Corequisite: Basic Marksmanship. May be repeated for up to 3 hours of degree credit.

MILS1002 Leadership Development (Sp) Introduction to basic military survival skills and outdoor craft. Subjects include basic rappel/bring down, survival, basic map reading/orientation, first aid and outdoor cold-weather survival skills. Introduction to small group leadership principles. Classroom 1 hour per week. Lab 2 hours per week. Corequisite: Basic Marksmanship. May be repeated for up to 6 hours of degree credit.

MILS1011 Rappelling, Outdoor Field Craft and Leadership Development (Sp) Incorporates various outdoor field craft involving both classroom and outdoor instruction. Subjects include basic rappel/bring down, survival, basic map reading/orientation, first aid and outdoor cold-weather survival skills. Introduction to small group leadership principles. Classroom 1 hour per week. Lab 2 hours per week. Corequisite: Basic Marksmanship. May be repeated for up to 3 hours of degree credit.

MILS1012 Leadership Development (Sp) Continuation of leadership skills presented in MILS 1001 and MILS 1011. Course focus is on small unit leadership, team building and management skills. Includes an introduction to small unit tactics. Students develop leadership foundations by leading discussions, developing and briefing operation plans using the military decision making model. Classroom 2 hours per week. Lab 1 hour per week. Corequisite: Lab component. Prerequisite: MILS 1001 and MILS 1011 or approval of Professor of Military Science.

MILS2002 Leadership Development (Sp) Continuation of leadership skills presented in MILS 2002. Course focus is on decision making process, time management, and leadership skills. Includes an introduction to military writing and basic tactics. Cadets continue training in land navigation, first aid, and outdoor field craft. Classroom 2 hours per week. Lab 1 hour per week. Corequisite: Lab component. Prerequisite: MILS 1001 and MILS 1011 or approval of Professor of Military Science.

MILS2010 Advanced Rifle Marksmanship (Sp) Course to develop the fundamental skills of Advanced Rifle Marksmanship. Class is conducted once a week with topics including: Air rifle, small bore firing, advanced practical exercises of different shooting positions and marksmanship competition
Course Descriptions

MILS 3004 Applied Leadership I (Fa) Development of managerial and leadership abilities, focusing on leadership styles and techniques. Prerequisite: MILS 1101.

MILS 3004 Advanced Leadership I (Sp) Development of managerial and leadership abilities, focusing on leadership styles and techniques. Prerequisite: MILS 1101.

MILS 3004 Advanced Leadership II (Sp) The study of various military organizations and their role in military operations. Discussion of command and staff management in military organizations, executive responsibility of Army commissioned officers, service customs, courtesies, and traditions. The senior year includes the study of personnel management, professional ethics, the military justice system, and the Army's training and maintenance management system. Lecture 3 hours, laboratory 3 hours per week. MS IV cadets plan and participate in 1 field training exercise per semester. Corequisite: Lab component. Prerequisite: Successful completion of MS III course work with other universities. Prerequisite: MILS 1101.

MKTG 4013 Music Lecture for Music Majors (Sp, Fa) Introduction to music. Lecture 3 hours per week providing experience in guided listening. Acquisition of vocabulary and certain fundamentals of music. Prerequisite: MILS 1101.

MKTG 4013 Reading and Listening (Su) The study of various musical organizations and their role in military operations. Discussion of command and staff management in military organizations, executive responsibility of Army commissioned officers, service customs, courtesies, and traditions. The senior year includes the study of personnel management, professional ethics, the military justice system, and the Army's training and maintenance management system. Lecture 3 hours, laboratory 3 hours per week. MS IV cadets plan and participate in 1 field training exercise per semester. Corequisite: Lab component. Prerequisite: Successful completion of MS III course work with other universities. Prerequisite: MILS 1101.

MKTG 4013 Reading and Listening (Sp) The study of various musical organizations and their role in military operations. Discussion of command and staff management in military organizations, executive responsibility of Army commissioned officers, service customs, courtesies, and traditions. The senior year includes the study of personnel management, professional ethics, the military justice system, and the Army's training and maintenance management system. Lecture 3 hours, laboratory 3 hours per week. MS IV cadets plan and participate in 1 field training exercise per semester. Corequisite: Lab component. Prerequisite: Successful completion of MS III course work with other universities. Prerequisite: MILS 1101.

MKTG 4013 Reading and Listening (Sp) The study of various musical organizations and their role in military operations. Discussion of command and staff management in military organizations, executive responsibility of Army commissioned officers, service customs, courtesies, and traditions. The senior year includes the study of personnel management, professional ethics, the military justice system, and the Army's training and maintenance management system. Lecture 3 hours, laboratory 3 hours per week. MS IV cadets plan and participate in 1 field training exercise per semester. Corequisite: Lab component. Prerequisite: Successful completion of MS III course work with other universities. Prerequisite: MILS 1101.

MKTG 4013 Reading and Listening (Sp) The study of various musical organizations and their role in military operations. Discussion of command and staff management in military organizations, executive responsibility of Army commissioned officers, service customs, courtesies, and traditions. The senior year includes the study of personnel management, professional ethics, the military justice system, and the Army's training and maintenance management system. Lecture 3 hours, laboratory 3 hours per week. MS IV cadets plan and participate in 1 field training exercise per semester. Corequisite: Lab component. Prerequisite: Successful completion of MS III course work with other universities. Prerequisite: MILS 1101.
Course Descriptions

Music Education (MUED)

MUED2012 Introduction to Music Education (Sp) A course designed to provide early experiences for the prospective music teacher. Students will become familiar with professional trends, music classroom organizational and management issues, and principles of effective education. Emphasizes trends in basic psychological and philosophical orientation, as well as observations in public school classrooms. Required of all Music Education majors.

MUED2552 Class Instruction in Orchestral String Instru- ments A course designed to provide early experiences for the prospective music teacher. Includes study of the instruments, techniques and pedagogy needed to teach stringed instruments in a class setting. Includes a lab that specifically focuses on peer teaching of concepts and methods related to teaching strings. Prerequisite: Bachelor of Music Major with an emphasis in PIANO, VOICE, STRG, or WWBP and sophomore standing.


MUED4031 Seminar for Professional Entry into Music Education (Sp, Fa) A seminar offered during student teaching semester to prepare the student for the role of a professional educator. Content includes professional ethics and conduct, classroom management, evaluation and grading, and application for certification. Prerequisite: MUED 3833.

MUED4112 Pedagogy in Music Education (Irreg.) A course designed to provide early experiences for the prospective music teacher. Students will become familiar with professional trends, music classroom organizational and management issues, and principles of effective education. Emphasizes trends in basic psychological and philosophical orientation, as well as observations in public school classrooms. Required of all Music Education majors. Prerequisite: MUED 3833.

MUAP1001 Applied Secondary-Level Voice/Instrument (Sp, Su, Fa) Private study of secondary voice/instrument. Instructor permission required to enroll. May be repeated for up to 2 hours of degree credit.

MUAP110V Honors Applied Major Voice/Instrument (Sp, Su, Fa) (1-4) Private study of the primary voice/instrument for music majors. Admission to MUAP 110V requires the successful completion of audition/repertoire requirements. Lab component. Prerequisite: Music major. May be repeated for up to 8 hours of degree credit.

MUAP130V Applied Skills Voice/Instrument (Sp, Su, Fa) (1-4) Private study of the primary voice/instrument for music majors. Continued development of fundamental musical and technical skills introduced in MUAP 110V. Corequisite: Lab component. Prerequisite: Music major; recommendation of instructor. May be repeated for up to 8 hours of degree credit.

MUAP2121 Piano Class for Music Majors III (Sp, Su, Fa) A continuation of MUAP 2120. Three class periods per week. Successful completion of MUAP 2121 will be given credit. Prerequisite: Music major pursuing a bachelor of Arts or Bachelor of Music major pursuing a degree in Piano Education. Private study of the primary voice/instrument for music majors. Corequisite: Lab component. Prerequisite: Two semesters of MUAP 210V with grades of "B" or better and recommendation of instructor. May be repeated for up to 8 hours of degree credit.

MUAP210V Honors Applied Major Voice/Instrument II (Sp, Su, Fa) (1-4) Continued private study of the primary voice/instrument for music majors. Corequisite: Lab component. Prerequisite: Two semesters of MUAP 200V with grades of "B" or better and recommendation of the instructor. May be repeated for up to 8 hours of degree credit.

MUAP230V Applied Skills Voice/Instrument II (Sp, Su, Fa) (1-4) Private study of the primary voice/instrument for music majors. Corequisite: Lab component. Prerequisite: Two semesters of MUAP 220V with grades of "B" or better and recommendation of the instructor. May be repeated for up to 8 hours of degree credit.

MUAP2310V Honors Applied Major Voice/Instrument III (Sp, Su, Fa) (1-4) Continued private study of the primary voice/instrument for honors music majors. Prerequisite: Two semesters of MUAP 210V with grades of "B" or better and recommendation of instructor. May be repeated for up to 8 hours of degree credit.

MUAP231V Honors Applied Major Voice/Instrument III (Sp, Su, Fa) Advanced private study of the primary voice/instrument for honors music majors. Prerequisite: Two semesters of MUAP 210V with grades of "B" or better and recommendation of instructor. May be repeated for up to 8 hours of degree credit.

MUAP2321 Piano Class for Music Majors IV (Sp, Su, Fa) A continuation of MUAP 2211. Two class periods per week. Successful completion of MUAP 2321 with a grade of B or better, credit for MUAP 2211 and 2321 will be given. Prerequisite: Music major pursuing a bachelor of Arts or Bachelor of Music major pursuing a degree in Piano Education. Private study of the primary voice/instrument for music majors. Corequisite: Lab component. Prerequisite: Two semesters of MUAP 220V with grades of "B" or better and recommendation of instructor. May be repeated for up to 8 hours of degree credit.

MUAP410VH Honors Applied Major Voice/Instrument IV (Sp, Su, Fa) (1-4) Private study of the primary voice/instrument for honors music majors at the advanced level in preparation for recital. Continuation of development of musical and technical skills introduced in MUAP 410V. Corequisite: Lab component. Prerequisite: Two semesters of MUAP 410V and recommendation of instructor. May be repeated for up to 8 hours of degree credit.

MUAP420I Honors Applied Recital II (Sp, Su, Fa) Preparation and performance of a public recital of a minimum of 50 minutes of music. Corequisite: MUAP 310V. May be repeated for credit.

MUAP4301 Composition Recital (Sp, Su, Fa) Preparation and performance of a public recital of a minimum of 50 minutes consisting of original musical compositions. May be repeated for credit.

MUAP5001 Voice/Instrument-Secondary Level (Sp, Su, Fa) Private study at the graduate secondary level. May be repeated for credit.

MUAP510V Applied Voice/Instrument (Sp, Su, Fa) (1-4) Private study of the primary voice/instrument for music majors at the advanced level. Emphasis will be on providing a laboratory environment representative of public school classrooms. Required of all Music Education majors.

MUAP510VH Honors Applied Major Voice/Instrument (Sp, Su, Fa) (1-4) Private study of the primary voice/instrument for honors music majors at the advanced level in preparation for recital. Continuation of development of musical and technical skills introduced in MUAP 410V. Corequisite: Lab component. Prerequisite: Two semesters of MUAP 410V and recommendation of instructor. May be repeated for up to 8 hours of degree credit.

MUAP5211 Honors Applied Recital II (Sp, Su, Fa) Preparation and performance of a public recital of a minimum of 50 minutes of music. May be repeated for credit.

MUAP5211T Honors Applied Recital III (Sp, Su, Fa) Preparation and performance of a public recital of a minimum of 60 minutes of music. May be repeated for credit.
MUEC 1341 Collegium Musicum I (irregular) Performance of early music; various combinations of instruments and/or voices. Two hours rehearsal weekly. May be repeated for up to 2 hours of degree credit.

MUEC 1401 Opera Theatre I (Sp, Fa) Study of opera through performances of scenes, chamber and major operatic productions. Admission with director's approval. May be repeated for up to 2 hours of degree credit.

MUEC 1411 Concert Choir I (Sp, Fa) Large ensemble study and performance of a range of choral literature. Emphasis on proper vocal production, breathing, intonation, and vocal registration. Style and technique will be refined during the semester. Open to all interested students. May be repeated for up to 2 hours of degree credit.

MUEC 1412 Inspirational Chorale I (Sp, Fa) Performance of African American Spirituals with participation in Negro spirituals, traditional/contemporary gospel music, and sacred world music. Rehearsal 3 hours per week. Admission with director's approval. Prerequisite: Audition and director's approval. May be repeated for up to 2 hours of degree credit.

MUEC 1451 Schola Cantorum I (Sp, Fa) Large, select choral ensemble with focus on the study and performance of a range of choral literature. Emphasis on high artistic standards through style and interpretation. Enrollment limited to more experienced singers; by audition only. Prerequisite: Lab component. Prerequisite: Director's consent. May be repeated for up to 2 hours of degree credit.

MUEC 1461 Wind Symphony I (Sp, Fa) Large, select choral ensemble with focus on the study and performance of a range of choral literature. Emphasis on high artistic standards through style and interpretation. Enrollment limited to more experienced singers; by audition only. Corequisite: Lab component. Prerequisite: Director's consent. May be repeated for up to 2 hours of degree credit.

MUEC 1721 Clarinet Ensemble I (Sp, Fa) Study and performance of music for multiple clarinets, including trios, quartets, quintets, and clarinet choir. Rehearsal 2 hours per week. May be repeated for up to 2 hours of degree credit.

MUEC 1731 Saxophone Ensemble I (Sp, Fa) Study and performance of music for multiple saxophones, including trios, quartets, quintets, and saxophone choir. Rehearsal 3 hours per week. May be repeated for up to 2 hours of degree credit.

MUEC 1741 Trumpet Ensemble I (Sp, Fa) Study and performance of music for multiple trumpets, including trios, quartets, quintets, and trumpet choir. Rehearsal 2 hours per week. May be repeated for up to 2 hours of degree credit.

MUEC 1751 Trumpet Ensemble II (Sp, Fa) Study and performance of music for multiple trumpets, including trios, quartets, quintets, and trumpet choir. Rehearsal 2 hours per week. May be repeated for up to 2 hours of degree credit.

MUEC 2341 Collegium Musicum II (irregular) Continuation of Collegium Musicum I. Performance of early music various combinations of instruments and/or voices. Two hours required. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEC 2401 Opera Theatre II (Sp, Fa) Continuation of Opera Theatre I. Study of opera through performances of scenes, chamber and major operatic productions. Admission with director's approval. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEC 2411 Concert Choir II (Sp, Fa) Continuation of Concert Choir I. Large ensemble study and performance of a range of choral literature. Emphasis on proper vocal production, breathing, intonation, and vocal registration. Style and interpretative elements will be highlighted during the semester. Open to all students. Corequisites: Lab component. Prerequisite: Director's consent. May be repeated for up to 2 hours of degree credit.

MUEC 2431 Symphony Orchestra II (Sp, Fa) Continuation of Symphony Orchestra I. Large, select orchestral ensemble setting with a focus on the study and performance of a range of choral literature. Emphasis on high artistic standards through style and interpretation. Enrollment limited to more experienced players; by audition only. Corequisite: Lab component. Prerequisite: Director's consent. May be repeated for up to 2 hours of degree credit.

MUEC 2451 Schola Cantorum II (Sp, Fa) Continuation of Schola Cantorum I. Performance of African American and liturgical music. Study and performance of a range of choral literature. Emphasis on high artistic standards through style and interpretation. Enrollment limited to more experienced players; by audition only. Corequisite: Lab component. Prerequisite: Director's consent. May be repeated for up to 2 hours of degree credit.

MUEC 2461 Wind Symphony II (Sp, Fa) Continuation of Wind Symphony I. Large, select orchestral ensemble setting with a focus on the study and performance of a range of choral literature. Emphasis on high artistic standards through style and interpretation. Enrollment limited to more experienced players; by audition only. Corequisite: Lab component. Prerequisite: Sophomore standing; director's consent. May be repeated for up to 2 hours of degree credit.

MUEC 2471 Jazz Performance Laboratory II (Sp, Fa) Continuation of Jazz Performance Laboratory I. Performance of jazz and a variety of performing styles. Rehearsal 8 hours per week. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEC 2501 Marching Band II (Fa) Continuation of Marching Band I. Large ensemble performs at football games. Emphasis on high performance standards and a variety of performing styles. Rehearsal 8 hours per week. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEC 2541 Saxophone Ensemble II (Sp, Fa) Performance of music for multiple saxophones, including trios, quartets, quintets, and saxophone choir. Rehearsal 3 hours per week. May be repeated for up to 2 hours of degree credit.
MUEN2481 Campus Band II (Sp, Fa) Continuation of Campus Band I. Large ensemble setting with emphasis on performing wind band literature and enhancing the musicianship of members. Focus on performance standards through style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN2501 Chamber Music II (Sp, Fa) Continuation of Chamber Music I. Performance of small ensemble music for any combination of instruments and/or voice. Rehearsal 3 hours per week. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN2521 Woodwind Quintet II (Sp, Fa) Continuation of Woodwind Quintet I. Study and performance of music for windwood quintet. Weekly coaching will emphasize intonation, blend, rhythm, and ensemble precision for various combinations of instruments ranging from the 18th to the 20th centuries. 3 hours of rehearsals weekly. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN2711 Flute Ensemble II (Sp, Fa) Continuation of Flute Ensemble I. Study and performance of music for flute ensemble performance. Concerts of artistic merit will serve the campus community and general public. Admission by audition. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN2751 Trumpet Ensemble II (Sp, Fa) Continuation of Trumpet Ensemble I. Study and performance of music for multiple trumpets, including trios, quartets, quintets, and brass choir. Rehearsal 2 hours per week. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN2781 Tuba Ensemble II (Sp, Fa) Continuation of Tuba Ensemble I. Large ensemble setting with emphasis on performance of music for multiple trombones, including trios, quartets, quintets, and low brass choir. Rehearsal 2 hours per week. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN2971 Marching Band II (Sp, Fa) Continuation of Marching Band I. Large ensemble performs at football games. Emphasis on style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Ad- mission by audition. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN3151 Symphonic Band III (Sp, Fa) Continuation of Symphonic Band II. Large ensemble setting with emphasis on the study and performance of a range of choral literature. Emphasis on high artistic standards through style and interpretation. Enrollment limited to more experienced players; by audition only. Prerequisite: Junior standing; director's consent. May be repeated for up to 2 hours of degree credit.

MUEN3481 Marching Band III (Sp) Continuation of Marching Band II. Large ensemble performs at football games. Emphasis on style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN3501 Chamber Music III (Sp, Su, Fa) Continuation of Chamber Music II. Large ensemble setting with emphasis on performance of any combination of instruments and/or voice. Rehearsal 3 hours per week. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN3541 Accompanying III (Sp, Fa) Continuation of Accompanying II. Large ensemble setting with focus on the study and performance of a range of choral literature. Emphasis on the study and performance of a range of choral literature. Emphasis on style and interpretation. Rehearsal 2 hours per week. Prerequisite: MUAP 110V; junior standing. May be repeated for up to 2 hours of degree credit.

MUEN3581 Vocal Ensemble III (Sp, Su, Fa) Continuation of Vocal Ensemble II. Study and performance of music for multiple choirs, including trios, quartets, quintets, and mixed choirs. Rehearsal 2 hours per week. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN3711 Flute Ensemble III (Sp, Fa) Continuation of Flute Ensemble II. Study and performance of music for multiple flutes, including trios, quartets, quintets, and flute choir. Rehearsal 2 hours per week. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN3751 Trumpet Ensemble III (Sp, Fa) Continuation of Trumpet Ensemble II. Study and performance of music for multiple trumpets, including trios, quartets, quintets, and trumpet choir. Rehearsal 2 hours per week. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN3781 Tuba Ensemble III (Sp, Fa) Continuation of Tuba Ensemble II. Study and performance of music for multiple trombones, including trios, quartets, quintets, and low brass choir. Rehearsal 2 hours per week. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN3841 Woodwind Quintet III (Sp, Fa) Continuation of Woodwind Quintet II. Study and performance of music for windwood quintet. Weekly coaching will emphasize intonation, blend, stylistic awareness, and ensemble precision. Rehearsal ranges from the 18th to the 20th centuries. 3 hours of rehearsals weekly. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN3851 Percussion Ensemble III (Sp, Su) Continuation of Percussion Ensemble II. Study and performance of ensemble music for multiple percussion instruments. Rehearsal 2 hours per week. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN3861 Wind Symphony III (Sp, Fa) Continuation of Wind Symphony II. Large ensemble setting with emphasis on performing wind band literature and enhancing the musicianship of members. Focus on performance standards through style and interpretation. Concerts of high artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN3911 Marching Band III (Sp) Continuation of Marching Band II. Large ensemble performs at football games. Emphasis on style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN4141 Marching Band IV (Fa) Continuation of Marching Band III. Large ensemble performs at football games. Emphasis on style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN4301 Accompanying IV (Sp, Fa) Continuation of Accompanying III. Large ensemble setting with emphasis on performing wind band literature and enhancing the musicianship of members. Focus on performance standards through style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Admission by audition or special approval. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN4341 Collegium Musicum IV (Irregular) Continuation of Collegium Musicum III. Performance of early music various combinations of instruments and/or voices. Two hours rehearsed weekly. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN4411 Marching Band IV (Fa) Continuation of Marching Band III. Large ensemble performs at football games. Emphasis on style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN4431 Symphony Orchestra III (Sp, Fa) Continuation of Symphony Orchestra II. Large ensemble setting with emphasis on performance of music for various combinations of instruments and/or voices. Two hours rehearsed weekly. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN4441 Marching Band IV (Fa) Continuation of Marching Band III. Large ensemble performs at football games. Emphasis on style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN4351 Saxophone Ensemble III (Sp, Fa) Continuation of Saxophone Ensemble II. Large ensemble setting with emphasis on the study and performance of a range of choral literature. Emphasis on high artistic standards through style and interpretation. Enrollmen limited to more experienced players; by audition only. Prerequisite: Junior standing; director's consent. May be repeated for up to 2 hours of degree credit.

MUEN4451 Marching Band IV (Fa) Continuation of Marching Band III. Large ensemble performs at football games. Emphasis on style and interpretation. Concerts of artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Sophomore standing. May be repeated for up to 2 hours of degree credit.

MUEN4501 Chamber Music IV (Sp, Su, Fa) Continuation of Chamber Music III. Large ensemble setting with emphasis on performance of any combination of instruments and/or voice. Rehearsal 3 hours per week. Prerequisite: Junior standing. May be repeated for up to 2 hours of degree credit.

MUEN4541 Accompanying IV (Sp, Fa) Continuation of Accompanying III. Large ensemble setting with emphasis on performance of any combination of instruments and/or voice. Rehearsal 2 hours per week. Prerequisite: MUAP 110V; junior standing. May be repeated for up to 2 hours of degree credit.

MUEN4641 Wind Symphony IV (Sp, Fa) Continuation of Wind Symphony III. Large ensemble setting with emphasis on performing wind band literature and enhancing the musician-
ship of members. Focus on performance standards through style and interpretation. Concerts of high artistic merit which serve the campus community and general public are required. Admission by audition. 

COURSE DESCRIPTIONS:

MUEN4471 Jazz Performance Laboratory IV (Sp, Fa) Continuation of Jazz Performance Laboratory III. Training in the various styles of jazz and popular music. Rehearsal 3 hours per week. Admission by audition. Prerequisite: Two semesters of MUEN 4471. May be repeated for up to 2 hours of degree credit.

MUEN4481 Campus Band IV (Sp, Fa) Continuation of Campus Band III. Large ensemble setting with emphasis on performing wind band literature and enhancing the musicianship of members. Focus on performance standards through style and interpretation. Concerts of high artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN4461 Wind Symphony IV (Sp, Fa) Continuation of Wind Symphony IV. Large ensemble setting with emphasis on performing wind band literature and enhancing the musicianship of members. Focus on performance standards through style and interpretation. Concerts of high artistic merit which serve the campus community and general public are required. Admission by audition. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN44611 Schola Cantorum IV (Sp, Fa) Continuation of Schola Cantorum IV. Large, select choral ensemble with focus on the study and performance of a range of choral literature. Emphasis on performing choral literature with style and interpretation. Enrollment limited to more experienced singers; by audition only. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN446111 Vocal Ensemble IV (Sp, Fa) Continuation of Vocal Ensemble IV. Study and performance of vocal chamber literature. Performance of African American choral literature. Emphasis on performing choral literature with style and interpretation. Enrollment limited to more experienced singers; by audition only. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN44641 Collegium Musicum V (Sp) Continuation of Collegium Musicum IV. Performance of early music vocal combinations of instruments and/or voices. Two hours rehearsal weekly. Prerequisite: Two semesters of MUEN 4431. May be repeated for up to 2 hours of degree credit.

MUEN44651 Schola Cantorum V (Sp, Fa) Continuation of Schola Cantorum IV. Large, select choral ensemble with focus on the study and performance of a range of choral literature. Emphasis on performing choral literature with style and interpretation. Enrollment limited to more experienced singers; by audition only. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN44831 Saxophone Ensemble IV (Sp, Fa) Continuation of Saxophone Ensemble IV. Study and performance of music for multiple saxophones, including trios, quartets, quintets, and small groups. Rehearsal 2 hours per week. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN44841 Accompanying IV (Sp, Fa) Continuation of Accompanying IV. Study and performance of music for multiple instruments, including trios, quartets, quintets, and small groups. Rehearsal 2 hours per week. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN44851 Percussion Ensemble IV (Sp, Su) Continuation of Percussion Ensemble IV. Study and performance of music for percussion instruments. Rehearsal 2 hours per week. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN448531 Woodwind Quintet IV (Sp, Fa) Continuation of Woodwind Quintet III. Study and performance of vocal chamber and major operatic production. Admission by director's approval. Prerequisite: Two semesters of MUEN 4401. May be repeated for up to 2 hours of degree credit.

MUEN4511 Chamber Music IV (Sp, Fa) Continuation of Chamber Music III. Performance of small ensemble music for any combination of instruments and/or voice. Rehearsal 3 hours per week. Prerequisite: Senior standing. May be repeated for up to 2 hours of degree credit.

MUEN4521 Woodwind Quintet IV (Sp, Fa) Continuation of Woodwind Quintet III. Study and performance of music for woodwind quintet. Weekly coaching will emphasize intonation, blend, stylistic awareness, and ensemble precision. Repertoire ranges from the 18th to the 20th centuries. 3 hours of rehearsals weekly. Prerequisite: Senior standing. May be repeated for up to 2 hours of degree credit.

MUEN4551 Percussion Ensemble IV (Sp, Su) Continuation of Percussion Ensemble III. Study and performance of ensemble music for multiple percussion instruments. Rehearsal 2 hours per week. Prerequisite: Senior standing. May be repeated for up to 2 hours of degree credit.

MUEN4581 Vocal Ensemble IV (Sp, Su, Fa) Continuation of Vocal Ensemble III. Study and performance of vocal chamber music. Rehearsal 8 hours per week. Prerequisite: Senior standing. May be repeated for up to 2 hours of degree credit.

MUEN4611 Vocal Ensemble V (Sp, Fa) Continuation of Vocal Ensemble IV. Study and performance of vocal ensemble music. Rehearsal 2 to 3 hours per week with extra rehearsals at the director's discretion. Admission by audition. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN4621 Inspirational Chorale V (Sp, Fa) Continuation of Inspirational Chorale IV. Performance of African American literature with particular emphasis on Negro spirituals, traditional/contemporary gospel music and sacred world music. Rehearsal 3 hours per week. Admission with director's approval. Prerequisite: Two semesters of MUEN 4401. May be repeated for up to 2 hours of degree credit.

MUEN4631 Symphony Orchestra V (Sp, Fa) Continuation of Symphony Orchestra IV. Large, select orchestral ensemble setting with emphasis on the study and performance of a range of symphonic literature. Emphasis on high artistic standards through style and interpretation. Enrollment limited to more experienced players; by audition only. Prerequisite: Two semesters of MUEN 4431. May be repeated for up to 2 hours of degree credit.

MUEN4641 Collegium Musicum V (Irregular) Continuation of Collegium Musicum IV. Performance of early music vocal combinations of instruments and/or voices. Two hours rehearsal weekly. Prerequisite: Two semesters of MUEN 4431. May be repeated for up to 2 hours of degree credit.

MUEN4651 Schola Cantorum V (Sp, Fa) Continuation of Schola Cantorum IV. Large, select choral ensemble with focus on the study and performance of a range of choral literature. Emphasis on performing choral literature with style and interpretation. Enrollment limited to more experienced singers; by audition only. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.

MUEN4671 Trombone Ensemble V (Irregular) Continuation of Trombone Ensemble IV. Study and performance of music for multiple trombones, including trios, quartets, quintets, and small groups. Rehearsal 2 hours per week. Prerequisite: Two semesters of MUEN 4451. May be repeated for up to 2 hours of degree credit.
MUEN5411 Conducting II: Vocal Music (Sp, Su) A study of the technique of conducting instrumental music groups. Prerequisite: MUPD 3851. Review of the central data and concepts of music history, with emphasis on individual periods as needed by students enrolled. Credit in this course may not be applied toward the Master of Music or Master of Education degree.

MUEN5471 Seminar in Bibliography and Methods of Research (Sp) A survey of the methods and materials of musical research, including bibliography, methods of analysis, and style in the presentation of results. Open to graduate students and to juniors in Honors.

MUHS3923H Honors Colloquium in Music (Irregular) Cov- ers a special topic or issue offered as part of the honors pro- gram. Prerequisite: Honors candidacy (not restricted to candid- acy in Music). May be repeated for up to 6 hours of degree credit.

MUSC499V Honors Essay (Irregular) (1-6) An honors re- search paper in Music History or literature. Ethnomusicology, Music Theory, or Music Education. Open to seniors in honors.

Ethnomusicology (MUSY)

MUSY4113H Pro-Seminar: Ethnomusicology (Irregular) An introduction to ethnomusicological study, with readings and discussion of seminal writings in the field and practical experience in ethnomusicological analysis and description. (Same as MUSY 5113) May be repeated for up to 6 hours of degree credit.

MUSY4113H Pro-Seminar: Honors Ethnomusicology (Irregular) An introduction to ethnomusicological study, with readings and discussion of seminal writings in the field and practical experience in ethnomusicological analysis and description. May be repeated for up to 6 hours of degree credit. May be repeated for up to 6 hours of degree credit.

MUSY477V Independent Research in Ethnomusicology (Irregular) (1-4) Subject matter not covered in other courses. In depth study of specialized topics in contemporary, historical, or systematic ethnomusicology, and practical instruction in essay-structuring and presentation. May be repeated for up to 4 hours of degree credit.

MUSY5113 Pro-Seminar: Ethnomusicology (Irregular) An introduction to ethnomusicological study, with readings and discussion of seminal writings in the field and practical experience in ethnomusicological analysis and description. (Same as MUSY 4113) May be repeated for up to 6 hours of degree credit.

MUSY5313 Seminar in Asian and Middle Eastern Musics (Irregular) Reading seminars on selected topics in Asian and Middle Eastern Musics.

MUSY777V Independent Research in Ethnomusicology (Irregular) (1-4) Subject matter not covered in other courses. In depth study of specialized topics in contemporary, historical, or systematic ethnomusicology, and practical instruction in essay-structuring and presentation. May be repeated for up to 4 hours of degree credit.

MUSY5313 Seminar in Asian and Middle Eastern Musics (Irregular) Reading seminars on selected topics in Asian and Middle Eastern Musics.

MUSY3923H Honors Colloquium in Music (Irregular) Covers a special topic or issue offered as part of the honors pro-gram. Prerequisite: Honors candidacy (not restricted to candid-acy in Music). May be repeated for up to 6 hours of degree credit. May be repeated for up to 6 hours of degree credit.

MUSY4113H Pro-Seminar: Honors Ethnomusicology (Irregular) An introduction to ethnomusicological study, with readings and discussion of seminal writings in the field and practical experience in ethnomusicological analysis and description. (Same as MUSY 5113) May be repeated for up to 6 hours of degree credit.

MUSY4113H Pro-Seminar: Honors Ethnomusicology (Irregular) An introduction to ethnomusicological study, with readings and discussion of seminal writings in the field and practical experience in ethnomusicological analysis and description. May be repeated for up to 6 hours of degree credit. May be repeated for up to 4 hours of degree credit.

MUSY477V Independent Research in Ethnomusicology (Irregular) (1-4) Subject matter not covered in other courses. In depth study of specialized topics in contemporary, historical, or systematic ethnomusicology, and practical instruction in essay-structuring and presentation. May be repeated for up to 4 hours of degree credit.
not limited to: European Folk Music; the musical or scholarly legacy of a particular figure.

MUTH5413 Process in Cross-cultural Performance Practices (Irregular) A survey of performance practices from his
torical western art music through modern non-western music. An
troductory course with readings from seventeenth- and eighteenth
teenth-century periods. Includes Ethnomusicology (prerequisite MUSY 5113 or MUSY 5213); The Music or Dance of a Selected Area (prerequisite at least one of MUSY 5313, MUSY 5323, MUSY 5423, MUSY 5523, MUSY 5343, or HUMN 4423); Historic Performance Practices (prerequisite MUTH 5413); Historical Eastern Asian Musicology (prerequisite MUSY 5313 or MUSY 5323); and Historical Central Asian or Middle- and Near-Eastern Mu-

Course Descriptions

Music Theory (MUTH)

MUTH1003 Basic Musicianship (Su) Introductory-level study in music theory and aural perception for students not pre-
pared for MUTH 1603 or MUTH 1621. Meets 4 days per week.

MUTH1603 Music Theory I (Sp) A study of diatonic harmonic practices, analysis, and realization. Prerequisite: MUTH 1003 or permission of instructor.

MUTH1621 Aural Perception I (Sp) Development of aural perception through ear training, sight singing, and keyboard harmon.

MUTH1631 Aural Perception II (Fa) Continued development of aural perception through ear training, sight singing, and key-
board harmony. Meets 2 hours per week. Prerequisite: MUTH 1621.

MUTH164V Composition I (Sp, Su, Fa) (1-4) Private lessons of one-half hour, and one hour of composition laboratory ses-

MUTH2603 Music Theory II (Fa) A continuation of MUTH 1603. Also includes chromatic harmony. Prerequisite: MUTH 1603.

MUTH2621 Aural Perception III (Sp) A continuation of MUTH 1631. Two hours per week, one hour credit. Prerequisite: MUTH 1621.

MUTH2631 Aural Perception IV (Fa) A continuation of MUTH 2621. Two hours per week, one hour credit. Prerequisite: MUTH 2621.

MUTH264V Composition II (Sp, Su, Fa) (1-4) Continuation of Composition I. Private lessons of one-half hour, and one hour of composition laboratory session per credit hour each week.

MUTH442V Composition Theory (Sp, Fa) (1-3) A continu-
ation and intensification of undergraduate music theory. (May not count for credit toward the Master of Music degree.)

MUTH462V Composition I (Sp, Fa) (1-4) Continuation of Composition III. Private lessons of one-half hour and one hour of composition laboratory session per credit hour each week. Continued development of advanced skills in creative musical expression. Specifically for composition-theory majors. Others admitted by consent. Prerequisite: Two semesters of MUTH 364V with grades of "B" and recommendation of instruc-
tor. May be repeated for up to 4 hours of degree credit.

MUTH477V Special Topics in Music Theory (Ir-
regular) Subject matter not covered in other courses. May be re-
peated for up to 4 hours of degree credit.

MUTH4923 Honors Colloquium in Music Theory (Irregular) Covers a special topic or issue, offered as part of the Honors program.

MUTH494V Senior Thesis (Sp, Su, Fa) (1-18)

MUTH5343 Analytical Techniques (Irregular) An intensive study of selected works from music literature. Scherchen-
analytic, rhythm analysis, and set theory analytical tech-
niques will be studied and employed in addition to traditional
harmonic and formal analysis. Prerequisite: MUTH 3613 or equivalent and graduate standing.

MUTH5623 Pedagogy of Theory (Irregular) Supervised teaching of an undergraduate course in music theory or aural perception, including lesson plan and examina-
tion preparation and in-class observation.

MUTH5643 Analysis of 20th Century Music (Irregular) Study of 20th century music and analytic techniques includ-
ing pitch class set theory and serial techniques. Prerequisite: Graduating standing.

MUTH5662 Instrumental Arranging (Su) A practical course in arranging for the small ensembles including keyboard,
review of scoring techniques, and development of personal strategies. Prerequisite: MUTH 462V or equivalent.

MUTH568V Composition (Sp, Su, Fa) (1-4) Private lessons of one-half hour, and one hour of composition laboratory ses-

MUTH5690 Independent Study in Music Theory (Irregular) (1-6) Provides students with an opportunity to pursue special study of topics in music theory. May be repeated for up to 12 hours of degree credit.

MUTH600V Master’s Thesis (Sp, Su, Fa) (1-6) The course presents an overview of theories, principles and concepts essential to professional nursing practice. It includes ethical and legal implications relevant to
health care systems. Focus is on the nursing process as the organizing framework for the delivery of care. It also explores the concept of health as a dynamic process. This is a pre-nursing and nursing majors only. Prerequisite: For pre-nursing and nursing majors only. Must have sophomore standing or above and a GPA of 3.0 or above.

NURS2021 Therapeutic and Interprofessional Communi-
fication (Sp, Su, Fa) Focuses on the development of interfer-

NURS217V Independent Study in Nursing (Sp, Su, Fa) (1-
regular) A selected learning experience in nursing to enhance knowl-
edge about and/or practice in the profession. Objectives and

NURS217V Honors Independent Study in Nursing (Ir-
regular) (1-2) A selected learning experience in nursing to exchange knowledge about and/or practice in the profession. Objectives and experiences are designed on an individual ba-

NURS3117 Individual Study (Irregular) A struc-
tured learning experience in nursing to improve knowledge of the science in nursing. Objectives and experiences are de-
ned on an individual basis with a faculty advisor. May be re-
peated for up to 7 hours of degree credit.

NURS3313 Pharmacology in Nursing (Fa) The use of thera-

NURS3314 Pathophysiology (Sp, Fa) The course focuses on underlying concepts common to pathophysiological processes across the life span. Factors that contribute to altered physi-
ologial functioning and the body’s adaptive and compensa-
tory mechanisms are studied. Emphasizes concepts essential for understanding the rationale for preventive and therapeutic nursing interventions in health and illness. This is a Level I course. Prerequisite: Admission into BSN professional program.

NURS3321L Health Assessment (Fa) The course focuses on assessment of client's health status, environment, nursing care needs, and referral needs. The course presents concepts necessary to performing the assessment of the adult client. This is a Level I course. Prerequisite: Admission into BSN professional program.

NURS3402 Nursing Concepts: Older Adult (Sp, Fa) This course focuses on gerontologic theories, concepts, and prin-
ciples as they relate to nursing care of older adults. Students explore socio-cultural context of gerontologic nursing, profes-
sional standards of practice, common health concerns, and future considerations. This is a Level I course. Prerequisite: Admission into the BSN Professional Program of Studies.

NURS3422 Nursing Concepts: Foundations of Profession-
al Practice (Fa) Introduction to the nursing process and the scope of basic human needs. The student learns to use nurs-
ing diagnoses and care plans in case studies. This is a Level I course. Corequisite: NURS 3423. Prerequisite: Admission to BSN professional program.

NURS3424 Professional Role Implementation I: Caregiver (Fa) Students apply basic nursing concepts and skills in labo-

NURS3634 Nursing Concepts: Adult Health and Illness I (Sp, Su, Fa) The course focuses on the adult population experiencing acute problems in the health-illness continuum. Utilizing the nursing process, nursing, and medical treatments of selected condi-
tions that will be emphasized in the acute care setting. This is a Level I course. Corequisite: NURS 3644. Prerequisite: NURS 3313, 3314, 3321L, 3402L, and 3422.

NURS3644 Professional Role Implementation II: Caregiver

University of Arkansas, Fayetteville
NURS4154 Nursing Concepts: Critical Care (Sp, Fa) Focuses on the adult population experiencing multiple or critical illnesses or conditions necessitating admission to a critical care unit. The course emphasizes both nursing and medical treatment modalities that contribute to the health assessment process. The role of documentation of health assessment in third party reimbursement is also explored. Pre-requisite: Admission to the RN-BSN program.

NURS4424 Nursing Concepts: Critical Care (Sp, Fa) Focuses on the adult population experiencing multiple or critical illnesses or conditions necessitating admission to a critical care unit. The course emphasizes both nursing and medical treatment modalities that contribute to the health assessment process. The role of documentation of health assessment in third party reimbursement is also explored. Pre-requisite: Admission to the RN-BSN program.

NURS5303 Role Development of the Advanced Practice Clinical Nurse Specialist (Fa) The study of role development of the Advanced Practice Clinical Nurse Specialist is based on the role of the Clinical Nurse Specialist (CNS). Concepts include role development, interdisciplinary communication and collaborative strategies, patient advocacy and serving as a leader in role implementation. Pre-requisite: Course 5003.

NURS5543 Advanced Concepts in Health Promotion with Diverse Populations (Fa) Provides a theoretical base for health promotion, risk reduction and disease prevention at the individual, family and community levels. A cross-disciplinary approach to achieve or preserve health is identified. Focuses on holistic plans and interventions that address the behavioral, social, environmental and cultural factors that influence health in diverse populations. Provides opportunity to develop, implement, and evaluate health promotion interventions for selected clients.

NURS5553 Evidence-Based Practice and Innovation in Nursing (Sp) This course focuses on developing evidence-based practice and innovation in nursing. Models and strategies for leadership in evidence-based practice and innovation, decision making, and translational scholarship will be examined.

NURS5563 Health Care Policy (Su) The course provides the concepts of the political process, health care policy, advocacy, health services, decision making and regulatory issues, health care financing, designing and implementing health care policies and evaluating outcomes. Access, cost, and quality of health care will be a major focus of the course. Pre-requisite: Admission to the graduate program or by permission of the instructor.

NURS5102 Advanced Health Assessment (Sp) Application of advanced health assessment techniques with adults within the context of the family and community. Differentiate abnormal findings, integrate normal findings, interpret diagnostic tests, and use clinical reasoning to formulate diagnoses for culturally diverse individuals. Emphasis on health promotion and disease prevention. Pre-requisite: Course 5111.

NURS5111 Clinical Pracitcim: Advanced Health Assessment (Sp) Clinical practice companion course for NURS 5102: Advanced Health Assessment. Opportunities to conduct health assessments on a variety of clients. Pre-requisite: Course 5102.

NURS5123 Advanced Pharmacology (Sp) Advanced concepts and application of pharmaco therapeutic and pharmacokinetics of broad categories of agents used for disease management of individuals. Provides the student with the knowledge and skills to manage (including the prescription of pharmacologic agents) a client’s common health problems in a safe, high-quality, cost-effective manner.

NURS5127 Advanced Pathophysiology (Sp) This course is designed for nurses experienced in the management of pathophysiological disorders. It includes mechanisms of disease, the immune response and selected system based disorders.

NURS5212 Advanced Medical-Surgical Nursing I (Fa) Clinical practicum for NURS 5212. Application of advanced theories, concepts, knowledge and skill in the care of diverse adult populations with complex acute health problems. Pre-requisite: All core courses.

NURS5232 Advanced Medical-Surgical Nursing II (Sp) Focuses on utilization of advanced theories, concepts, knowledge and skill in the care of diverse adult populations with complex chronic health problems. Corequisite: NURS 5245. All core courses.

NURS5245 Clinical Pracitcim: Advanced Medical-Surgical Nursing II (Sp) Clinical practicum for NURS 5232: Application of advanced theories, concepts, knowledge and skill in the care of adults with chronic health problems. Pre-requisite: Course 5232. All core courses.

NURS5313 Curriculum and Evaluation in Nursing Education (Su) Considers knowledge and skills needed for curriculum and program development and evaluation for a variety of nursing education settings.

NURS5333 Focused Practicum in Nursing (Su) Supervised experience in the nursing educator role in both classroom and clinical settings.

NURS5343 Independent Study: Specialty Development I
Course Descriptions

OMGT4303 Industrial Safety and Health Administration (Irregular) Based on Federal Regulations for Occupational Safety and Health Administration (OSHA) examines regulations and as well as their commonsense application. Covers various standards, such as those for material handling, personal protective equipment, toxic substances, and machine guarding. Uses case studies and real-world scenarios to present topics and demonstrate their application.

OMGT4313 Law and Ethics (Sp, Su, Fa) Analysis of the fundamental legal principles applicable to protecting the rights and interests of individuals and organizations; contracts and litigation processes; constitutional law and legislation, formation and discharge of contracts; agency relationships; torts; labor laws; patents; trademarks; copyrights; unfair competition. Not for graduate credit.

OMGT4323 Industrial Cost Analysis (Sp, Su, Fa) Use of accounting information for planning and control from a management viewpoint; principles of cost accounting and other aspects of production costs; budgeting, depreciation, taxes, distribution, and methods of capital investment. Prerequisite: OMGT 4303 or consent. Not for graduate credit.

OMGT4333 Applied Statistics (Sp, Su, Fa) Fundamentals of probability and distribution theory with applications in managerial decision making. Descriptive methods, probability distributions, sampling distributions and hypothesis testing are included. Not for graduate credit.

OMGT4613 Lean Production and Inventory Control (Irregular) Designed to familiarize students with limitations and pitfalls of inventory control for the production and services. Operations problems of production systems are examined, including objective/subjective forecasting methods, aggregate planning of work force, and production control. Emphasis is placed on inventory models of EOQ for known and unknown demand. Supply chain management and lean manufacturing concepts are also discussed. Prerequisite: OMGT 4303 and OMGT 5003.

OMGT4623 Strategic Management (Irregular) Examines strategic management, which is defined as the art and science of formulating, implementing, and evaluating cross-functional decisions that enable an organization to achieve its long-term objectives. Level of strategic management will be covered in conjunction with case studies to provide opportunity for analysis and experience in applying these principles in an operations management environment. Required course (may be substituted by OMGT 5673).

OMGT4783 Project Management for Operations Managers (Irregular) An introduction to the Critical Path Method and Program Evaluation and Review Technique. Covers project planning and control methods: activity sequencing; time-cost trade-offs; allocation of manpower and equipment resources; scheduling activities and computer systems for PERT/CPM. Scheduling activities and computer systems for PERT/CPM trade-offs; allocation of manpower and equipment resources; supply chain and inventory management; material requirements planning; JIT; maintenance and reliability; and other subjects relevant to the field. Required course.

OMGT5013 Supply Chain Management for Operations Managers (Irregular) Focuses on the development and application of decision-making tools for supply chain management. Includes linear programming models, computer simulation models, and management science. Students will be introduced to applications of operations research and solution methods, using spreadsheet software. Required course. Prerequisites: OMGT 4323 or OMGT 5303.

OMGT5033 Human Resource Management (Irregular) A review of Human Resources Management functions as they apply in today's business setting with specific emphasis on regulatory compliance, total rewards systems, recruitment, selection, training, and related systems. Includes topics designed both for HRM professionals and for line managers/professionals who need to understand the roles and responsibilities of HR as a business partner. Not for graduate credit.

OMGT5113 Operations Management in the Service Sector (Irregular) Reviews the role of the operations management in the service sector, e.g., health care systems, banking, public utilities, service industries, etc. Emphasizes the principles and methodologies applicable to the solution of problems within the service industries. Prerequisite: Graduate standing.

OMGT5143 Strategic Issues in Human Resource Management (Irregular) Explores the concept of Strategic Human Resource Management with emphasis on effective partnering by various HR functions with all levels of management to support the long-term strategic goals of the organization. Course will cover the management of work force and production under seasonal demand; and in-depth examination of supply chain performance, cost, and metrics; demand forecasting; aggregate planning; inventory management; supply chain design and distribution; transportation modeling and analysis; supply chain coordination; the role of information technology; and sourcing decisions. Spreadsheet tools and techniques will be used to analyze supply chain performance. Prerequisite: OMGT 4333 and OMGT 5003.

OMGT5153 Operations Management in the Service Sector (Irregular) Reviews the role of the operations management in the service sector, e.g., health care systems, banking, public utilities, service industries, etc. Emphasizes the principles and methodologies applicable to the solution of problems within the service industries. Prerequisite: Graduate standing.

OMGT5303 Health Care Policies and Issues (Irregular) Explores health care management strategies and policy development with emphasis on health insurance, Medicare, Medicaid and managed care, as well as employee health benefits. The roles of government and business in policy formulation are addressed, as are the issues of financing health care, legal and ethical considerations, current healthcare issues, and quality measurements.

OMGT5373 Quality Management (Irregular) Introduces students to quality management concepts and their use in enhancing organizational performance and profitability. History of the quality movement, its broad application in key economic sectors, and philosophical perspectives of major quality leaders will be discussed. Focus is on current process improvement, using data and information to guide organizational decision making. The Six Sigma approach and associated statistical tools, supporting process improvement, are also covered. Prerequisite: OMGT 4333.

OMGT5423 Operations Management & Global Competitiveness (Irregular) Focuses on the decision-making authority, structures, and controls examined. Topics also include leadership, motivational techniques, ethical perspectives on decision-making and corporate social and environmental responsibility. Required course (may be substituted by OMGT 4623).
PHED1003 The Physical Education Profession: An Overview (Sp, Fa) An introduction to the teaching of physical education. May be repeated for credit. (Same as CATE 1001, CIED 1011)

PHED1023 Teaching Progressions and Assessment of Basic Skills (Sp, Fa) This course serves as an introduction to motor skill analysis. Emphasis is placed on teaching and task analysis of locomotor and manipulative skills.

PHED2002 Teaching Progressions and Assessment of Advanced Skills (Sp, Fa) This course is designed to teach the progression and analysis of motor and sport skills. Specific emphasis is on the commonalities of various motor skills as they apply to various sport movements. Prerequisite: PHED103

PHED3001 Teaching Practicum (Sp, Fa) P-12 Kinesiology majors serve as a teaching assistant with a local school physical education teacher. This course should be taken the semester before PHED 407V Internship. Prerequisite: Senior standing in KINS P-12 program and passing scores on all three parts of Praxis I submitted to instructor of record.

PHED3002 Teaching and Leading Outdoor Recreation and Experimental Activities (Sp, Fa) This course is designed to provide opportunities for the student to acquire the skills, teaching and leadership techniques associated with outdoor recreational and experimental learning activities, including camping, orienteering, cooperative activities, and experiential learning activities. Corequisite: PHED 3032. Prerequisite: PHED 1003 or KINS 1013, PHED 2013 and junior standing.

PHED3003 Teaching Stunts and Tumbling (Sp, Fa) Instructional strategies for teaching tumbling are taught. Prerequisite: PHED 1003 or KINS 1013 and PHED 2013 and junior standing.

PHED3004 Teaching Rhythms (Sp, Fa) Designed to teach the following to P-12 Physical Education majors how to perform, teach, develop and implement rhythm activity. Corequisite: PHED 2002. Prerequisite: PHED 1003 or KINS 1013 and PHED 2013 and junior standing.

PHED3002 Teaching Fitness (Sp, Fa) Instructional strategies for teaching public school students about fitness concepts. Corequisite: PHED 3022. Prerequisite: PHED 2013 and junior standing.

PHED3034 Secondary Physical Education (Sp, Fa) Physical education instructional strategies and curriculum for secondary school. Prerequisite: PHED 1003 or KINS 1013, PHED 2013 and PHED 2023. Corequisite: PHED 3702. May be repeated for credit.

PHED3030 Principles and Problems of Coaching (Su, Fa) A focus on the various aspects of coaching the athletes in contemporary society through an examination of research findings and related effective teaching strategies. Attention will be given to principles, problems and understanding essential to the management of athletic contests. Prerequisite: Junior standing.

PHED3035 Elementary Physical Education (Sp, Su, Fa) Program planning and techniques of teaching physical education activities to children; for early childhood, elementary and physical education teachers, supervisors, and principals. Corequisite: Junior standing.


PHED3063 Physical Education for Special Populations (Sp, Fa) Provides fundamental concepts and skills essential to physical education programming for handicapped students. Deals with definitions, handicapping conditions, development and remedial activities, games, and sports. Prerequisite: Junior standing.

PHED4001 Coaching Practicum (Sp, Fa) Designed for students who want to add the Coaching Endorsement to the state teaching license. Student serves as a coaching assistant with a local school, University or recreational sports team. Prerequisite: PHED 3003 and proof of current First Aid/CPR/AED certification submitted to instructor of record.

PHED4002 Class Management (Sp, Fa) This course is designed to provide opportunities for the student to acquire an understanding that emphasizes class management; and includes professional ethics, and school policies related to students, teachers, and activities. Prerequisite: PHED 3003 and PHED 4263, PHED 4731. Prerequisite: (1) Senior status in KINSBS P-12, (2) have a grade of "C" or better in all KINS/PHED Teacher Education classes: PHED 1003, 2013, 2033, 3001, 3002, 3003, 3022, 3033, 3903, 3913, 3922, 3933, 3941 and 4413 (3) must have a cumulative grade point average of 2.5 or greater or a minimum 2.75 grade point average in KINS/PHED Teacher Education classes; Praxis I (all parts) passed, completed or registered for Praxis II content knowledge exam and scores presented to the internship supervisor. May be repeated for credit.

PHED407V Physical Education Teaching Internship (Sp, Fa) This internship involves supervised teaching experience in a P-12 setting. Students will be placed under the guidance of a mentor teacher at specific school sites within NW Arkansas. Internship will be done at both the elementary and secondary levels. Corequisite: PHED 4023, PHED 4263, PHED 4731. Prerequisite: Senior status in KINSBS P-12, (2) have a grade of "C" or better in all KINS/PHED Teacher Education classes; Praxis I (all parts) passed, completed or registered for Praxis II content knowledge exam and scores presented to the internship supervisor. May be repeated for credit.

PHED4253 Professional Issues in Physical Education (Sp, Fa) This course focuses on the contemporary issues surrounding effective teaching practices in physical education. Students place emphasis on critically reviewing issues relevant to the physical education teacher. Corequisite: PHED 407V, PHED 4023, and PHED 4731. Prerequisite: Senior in KINSBS P-12; & grade of "C" or better in all KINS/PHED Teacher Ed. courses; must have cumulative GPA of 2.5 or greater with a min. 2.75 GPA in Teacher Ed. courses, and Praxis I (all parts) passed, completed or registered for Praxis II content knowledge exam and scores presented to the internship supervisor.

PHED4731 Senior Seminar in Physical Education (Irregular) This course will cover special topics for the Kinesiology P-12 students in preparation for entry into the profession. In addition to specific topics, students will prepare their final portfolio and make a formal presentation. Corequisites: PHED 4003 and PHED 4263. Prerequisite: Senior in KINSBS P-12; & grade of "C" or better in all KINS/PHED Teacher Ed. courses; must have cumulative GPA of 2.5 or greater with a min. 2.75 GPA in Teacher Ed. courses, and Praxis I (all parts) passed, completed or registered for Praxis II content knowledge exam and scores presented to the internship supervisor.

PHED5233 Research on Teaching in Physical Education (Odd years, Fa) A review of contemporary research literature informing effective teaching practices in physical education settings. Students gain experience in critically reviewing literature in physical education as well as related behavioral science, education, and humanities disciplines; emphasis is placed on incorporating research findings into personal teaching strategies.

PHED5243 Sport Skill Assessment and Instructional Strategies (Odd years, Su) The focus of this course is practical application of instructional strategies in the area of sport and physical education activities.

PHED5253 The Physical Education Curriculum (Even years, Fa) Principles, problems, procedures, and the influence of educational philosophy on programs in physical education and their application in the construction of a course of study for a specific situation.

PHED5273 Professional Issues in Physical Education and Sport (Even years, Fa) A review of contemporary research literature informing effective teaching practices in physical education settings. Students gain experience in critically reviewing literature and discussing current issues.

PHED5313 Risk Management in Physical Education & Athletics (Even years, Su) This course is designed to provide opportunities for the student to acquire an understanding of how to reduce the risk of injuries and eliminate hazards that may contribute to injuries associated with physical education and athletics.

PHED5413 Adapted Physical Education (Even years, Fa) Methods, techniques and special groups of physical education for the atypical child.

PHED5553 Scientific Principles of Movement and Performance (Odd years, Su) This course focuses on theoretical information about sport biomechanics and movement principles, with practical applications to the physical education of students with special needs.

PHED747V Internship (Sp, Fa) (1-6)

PHED7383 Supervision in Physical Education (Odd years, Fa) The focus of this course is instructional supervision as a set of complex processes in which the supervisor works within accepted guidelines and functions to effectively supervise a teacher’s pedagogical development. The Physical Education Instructional Supervision (PEIS) Model will be used to facilitate this process.
Course Descriptions

PHIL103 Critical Reasoning: Discover, Deduction, and Intelectual Self-Defense (Irregular) This is a practical, “hands-on” course in sound reasoning, critical thinking, and the careful evaluation of arguments. The course will utilize a range of real-world sources (television, Internet, magazines, etc.) and will be informed in content and method by the psychology of human judgment.

PHIL190 Special Topics in Philosophy and Culture (Irregular) Exploration of introductory-level special topics of an issue or issues in contemporary culture not otherwise covered in the philosophy curriculum.

PHIL2003H Honors Introduction to Philosophy (Sp, Su, Fa) An examination of basic philosophical topics as the existence of God, the nature of the human mind, the relationship between appearance and reality, the forms and limits of human knowledge, freedom of the will, and standards of right and wrong. Includes both historical and contemporary readings. (Same as PHIL 3003C)

PHIL2003H Honors Introduction to Philosophy (Sp, Su, Fa) An examination of basic philosophical topics as the existence of God, the nature of the human mind, the relationship between appearance and reality, the forms and limits of human knowledge, freedom of the will, and standards of right and wrong. Includes both historical and contemporary readings. (Same as PHIL 3003C)

PHIL2003C Introduction to Philosophy (Sp, Fa) An examination of such basic philosophical topics as the existence of God, the nature of the human mind, the relationship between appearance and reality, the forms and limits of human knowledge, freedom of the will, and standards of right and wrong. Includes both historical and contemporary readings. Corequisite: Drill component. (Same as PHIL 2003C)

PHIL101 Introduction to Ethics (Sp, Su, Fa) Basic concepts of moral philosophy, including historical and contemporary literature concerned with such issues as ethical relativism vs. objectivism, duty, happiness, freedom of the will and responsibility, facts and values, individual liberty and society. Application of theories to substantive questions.

PHIL2023 Logic (Sp, Su, Fa) Traditional and modern methods of deductive and inductive inference. Degree credit may not be awarded for both PHIL 1023 and 2023.

PHIL2033 Human Nature and the Meaning of Life (Irregular) Examination of important views on human nature, the meaning of human existence, the value and significance of different human activities, and on what philosophy, religion, art, and literature have to teach us on these topics. Reading may be drawn from a variety of philosophical, literary, and religious writings.

PHIL204 Special Topics in Explorations (Irregular) Explores topics in philosophy that are not currently covered in lower-level philosophy courses.

PHIL3103 Ethics and the Professions (Sp, Su, Fa) After a survey of historical ethical theories, questions about nature and the natural environment. Topics of discussion include anthropocentric and biocentric ethics, population control, obligations to future generations, animal rights, moral considerability, Leopold’s land ethic, deep ecology, and ecocentrism.

PHIL2023 Philosophy and the Christian Faith (Irregular) This course will deal with philosophical issues that arise in Christian theology. Topics to be discussed may include the doctrines of the incarnation, the Trinity, atonement, hell, and suffering, as well as the nature of God and the relationship between faith and reason.

PHIL3103 Honors Ethics and the Professions (Sp, Su, Fa) After a survey of historical ethical theories, questions about nature and the natural environment. Topics of discussion include anthropocentric and biocentric ethics, population control, obligations to future generations, animal rights, moral considerability, Leopold’s land ethic, deep ecology, and ecocentrism.

PHIL3103 Honors Ethics and the Professions (Sp, Su, Fa) After a survey of historical ethical theories, questions about nature and the natural environment. Topics of discussion include anthropocentric and biocentric ethics, population control, obligations to future generations, animal rights, moral considerability, Leopold’s land ethic, deep ecology, and ecocentrism.

PHIL105 Capstone Course for Philosophy Majors (Sp) An undergraduate seminar to be taken in the student’s final semester(s). Content will vary with the instructor. The object is for the student to sharpen his or her philosophical skills by, e.g., writing short papers, giving class presentations, and writing a substantial final essay. Prerequisite: 21 hours of philosophy.

PHIL199Y Honors Course (Sp, Su, Fa) (1-4) Prerequisite: Junior standing. May be repeated for up to 12 hours of degree credit.

PHIL2003 Ancient Greek Philosophy (Fa) Pre-Socratic, Socrates, Plato, and Aristotle. Prerequisite: 3 hours of philosophy.

PHIL4013 Plotinus & Origin of Christian Theology (Sp) The study of Plato, Plotinus, and Neoplatonism, including Philo, St. Augustine, and Dionysius. Prerequisite: 3 hours of philosophy.

PHIL2003 Eleventh Century Continental Philosophy (Fa) The study of major figures of the 11th century including Abbe Rutebeuf, Anselm, Albertus Magnus, St. Thomas Aquinas, and their connections with individuals.

PHIL2003 Twelfth Century Continental Philosophy (Irregular) Study of major figures (e.g., Siger, Duns Scotus, William of Ockham, Thomas Aquinas, and John Duns Scotus) and their connections with individuals.

PHIL2003T Thirteenth-century Continental Philosophy (Irregular) Study of major figures (e.g., Siger, Duns Scotus, William of Ockham, Thomas Aquinas, and John Duns Scotus) and their connections with individuals.

PHIL2003D Fourteenth-century Continental Philosophy (Irregular) Study of major figures (e.g., Siger, Duns Scotus, William of Ockham, Thomas Aquinas, and John Duns Scotus) and their connections with individuals.

PHIL2003E Fifteenth-century Continental Philosophy (Irregular) Study of major figures (e.g., Siger, Duns Scotus, William of Ockham, Thomas Aquinas, and John Duns Scotus) and their connections with individuals.

PHIL3923H Honors Colloquium (Irregular) May be repeated for up to 3 hours of degree credit.

PHIL409V Graduate Readings (Sp, Su, Fa) (1-6) Supervised individual readings in historical and contemporary philosophy. May be repeated for up to 3 hours of degree credit.

PHIL700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy.

PHYS100V Projects (Irregular) (1-2) Independent study in experimental or theoretical physics for lower division undergraduate students. May be repeated for up to 2 hours of degree credit.

PHYS1021M Honors Physics and Human Affairs Laboratory (Sp, Su, Fa) Laboratory 2 hours per week. Pre- or Corequisite: PHYS 1021H. (Same as PHYS 1021L)

PHYS1021L Physics and Human Affairs Laboratory (Sp, Su, Fa) Laboratory 2 hours per week. Pre- or Corequisite: PHYS 1023.

PHYS1023 Physics and Human Affairs (Sp, Su, Fa) The great ideas of physics, together with their philosophical and social impact. Scientific topics include space, time, heat, electricity, quantum mechanics. Philosophical and social topics include methods and values of science, problems related to energy sources, and implications of modern weapons. Non-mathematical course designed for non-science majors. Along with PHYS 1021L, can be used to satisfy a 4-year physical science requirement for a B.A. degree. Students who have received credit in PHYS 2013 and 2033, or 2053 and 2073 cannot also receive degree credit in this course. Prerequisite: PHYS 1021L.

PHYS1023H Honors Physics and Human Affairs (Sp, Su, Fa) The great ideas of physics, together with their philosophi- cal and social impact. Scientific topics include cosmology, relativ- ity, quantum mechanics. Philosophical and social topics include methods and values of science, problems related to energy sources, and implications of modern weapons. Non-mathematical course designed for non-science majors. Along with PHYS 1021L, can be used to satisfy a 4-year physical science requirement for a B.A. degree. Students who have received credit in PHYS 2013 and 2033, or 2053 and 2073 cannot also receive degree credit in this course. Coreq- uisite: PHYS 1021M.

PHYS1034 Physics for Elementary Education Majors (Sp) For elementary education majors. Physical science concepts based on state frameworks are explored in a mixed lecture/ lab environment. The inquiry-based lab activities can be trans- ferable for school classroom use. Topics covered include: scientific inquiry, motion and forces, conservation of energy, heat, light, electricity and simple circuits, and magnetism. Prerequisite: Elementary education major. Corequisite: Lab component.

PHYS1044 Physics for Architects (Fa) The relation between the principles of physics and the practice of building and architectural design. Topics include thermodynamics under various loads, the statics and dynamics of fluids, thermal storage, thermal expansion, the greenhouse effect, heat transfer, refrigeration, the energy problem, efficiency in the

University of Arkansas, Fayetteville

394
operation of buildings. One underlying theme is that the self-sufficiency of a building is an important part of architecture. Lecture 3 hours, laboratory 2 hours per week. Corequisite: Lab component. Prerequisite: Major in architecture or interior design or agricultural education & communication technology.

PHYS1054 Physics for Architects II (Sp) Acoustics, electricity, and environmental physics. Topics include resonance, acoustical isolation, interference, reverberation time, electrical circuitry with emphasis on power and efficiency, electrical storage, light sources, reflection, refraction, absorption, transmission, color, and astronomy (to give per-
vective to the use of sunlight in architecture), heat, noise, and radioactivity pollution. Lecture 3 hours, laboratory 2 hours per week. Corequisite: Lab component. Prerequisite: PHYS 1053.

PHYS2031 College Physics I (Su, Fa) A non-calculus sur-
vvey of the principles of physics including mechanics, heat and sound. Lecture 3 hours per week and drill 1 hour per week. Corequisite: Drill component and PHYS 2011L. Prerequisite: (MATH 1203 and MATH 1213) or (MATH 1284 or MATH 2554) or a score of at least 26 on the math component of the ACT exam, or a score of at least 600 on the math component of the SAT.

PHYS2031L College Physics II Laboratory (Su) Laboratory 2 hours per week. Corequisite: PHYS 2033.

PHYS2052 Electricity and Magnetism (Sp, Su) Continuation of PHYS 2032. Topics include electricity and magnetism, light, relativity, quantum mechanics, atomic and nuclear structure. Lecture 3 hours, drill (PHYS 2032D) 1 hour per week. Corequisite: Drill component. Prerequisite: PHYS 2032.
PHYS5413 Quantum Mechanics I (Fa) Non-relativistic quantum mechanics; the Schroedinger equation; the Heisenberg matrix mechanics formulation; transition from classical to quantum mechanics; the Schrodinger - Born - Oppenheimer approximation; the Pauli exclusion principle. Corequisite: PHYS 4432.

PHYS5413 Advanced Topics in Complexity (Irregular) The goal of the course is to give students tools to investigate the behavior of complex systems and to analyze the relationship of non-linear dynamics and chaos to complex biological and non- biological systems. A special emphasis will be given to understanding the way neurons work as biological computing elements. Corequisite: PHYS 5413 or equivalent.

PHYS5613 Quantum Optics (Even years, Fa) Properties of light and its interaction with atoms, particular attention given to the laser and recent experiments. Classical theory of resonance; Optical Bloch Equ.; 2 level atoms in steady fields; pulse propagation; interaction of light with matter; coherent states and coherent functions; gas, solid, and dye lasers; photon echoes and superradiance; quantum electrodynamics and spontaneous emission. Corequisite: PHYS 5413 or equivalent.

PHYS5713 Condensed Matter Physics II (Even years, Sp) The course covers surface physics, properties of homogeneous and inhomogeneous semiconductors, dielectric and ferroelectric properties, defects in crystals, spin interaction and magnetic properties, superconductivity, and band structure calculation. Corequisite: PHYS 5713 and PHYS 5413.

PHYS5800 Seminar (Sp, Fa) (1-2) May be repeated for up to 3 hours of degree credit.

PLSC3213 The American Congress (Fa) Survey of the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system. Same as IREL 2813.

PLSC3223 Arkansas Politics (Sp) Presentation of important policies of landmark cases and/or legislative acts. Exploration of the political process, public policy, social development, implementation, and evaluation at various levels of government. (Same as IREL 2813)

PLSC3103 Public Administration (Sp) Introduction to the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system.

PLSC2003H Honors American National Government (Fa) Survey of the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system. May be repeated for up to 6 hours of degree credit.

PLCS2003 American National Government (Sp, Su, Fa) Survey of the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system. May be repeated for up to 6 hours of degree credit.

PLSC3103 Public Administration (Sp) Introduction to the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system. May be repeated for up to 6 hours of degree credit.

PLSC3103 Public Administration (Sp) Introduction to the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system. May be repeated for up to 6 hours of degree credit.

PLSC3103 Public Administration (Sp) Introduction to the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system. May be repeated for up to 6 hours of degree credit.

PLSC3103 Public Administration (Sp) Introduction to the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system. May be repeated for up to 6 hours of degree credit.

PLSC3103 Public Administration (Sp) Introduction to the history, basic ideas, structure, and political processes of the national government of the United States, including the fundamental relationships of the federal system. May be repeated for up to 6 hours of degree credit.
Constitution; the internal procedures and personalities of the Senate and House; the central place of Congress in shaping domestic and foreign policy. Prerequisite: PLSC 2003.

PLSC3243 The Judicial Process (Fa) The structure and operation of the state and national court systems. Emphasis is upon the role of the judiciary in the American political system and the consequences of judicial decision-making. Prerequisite: PLSC 2003.

PLSC3253 Urban Politics (Sp) Analysis of comparative urban systems, including political processes, public policy, social problems, governmental structure, and voter behavior. Prerequisite: PLSC 2003.

PLSC3263 Latino Politics (Fa) Analyzes the social, economic, and political issues impacting the Latino (or Hispanic) community. Emphasis is placed upon how the community itself responds to and influences these factors.

PLSC3273 Cultures of the South (Sp) Survey of the diverse ethnic and racial groups of the American South with special emphasis on social and cultural trends related to contemporary developments. (Same as ANTH 3250, SOCI 3250)

PLSC3293 African American Politics (Fa) This is a survey course designed to provide students with a comprehensive overview of African American political participation in the United States. In addition to analyzing important events in African American Politics, the course attempts to explain evolving patterns of political participation in Black America. (Same as AAST 3293, PLSC 3293)


PLSC3523 Politics of the Middle East (Fa) Survey of the unity and diversity in the political development of the Middle East, as evident in its geographical legacies, state formation, civil society, social class, and political identity.

PLSC3553 Western European Politics (Irregular) Comparative analysis of Western European parliamentary systems with special attention to political traditions, constitutional arrangements, socio-economic structure, and the political and legislative processes in countries such as Britain, France, and Germany. Prerequisite: PLSC 2003 or PLSC 2013.

PLSC4103 Introduction to Urban Planning (Fa) Reviews the many forms, functions, and purposes of American cities. Covers basic planning theories, surveys the various sub-fields of planning, discusses trends in the planning field, and utilizes computer simulations. Prerequisite: PLSC 3253.

PLSC4193 Administrative Law (Sp) Legal aspects of the administrative process and the effect of legal principles and procedures. Legal decision-making is given to the limitation of administrative discretion and the judicial review of administrative decision. Prerequisite: PLSC 3103 or PLSC 4253.

PLSC4203 American Political Parties (Irregular) The nature, function, and history of political parties in the United States with emphasis on party membership, organization, campaign techniques, finance and electoral alliances. Prerequisite: PLSC 2003 or PLSC 2013.

PLSC4213 Campaigns and Elections (Irregular) This course examines the American electoral process. It is an empirical course that provides opportunities for original analysis of survey data and election returns. Emphasis is placed on the most recent federal election. Prerequisite: PLSC 2003

PLSC4233 The American Chief Executive (Sp) Offices and roles of the President and state governors of the United States focusing on their economic, legal, and administrative responsibilities and political leadership. Prerequisite: PLSC 2003.

PLSC4243 Minority Politics (Even years, Sp) Reviews political action and concepts of political activity by minority groups, focusing on contemporary political behavior.

PLSC4253 The U.S. Constitution I (Sp) United States Supreme Court decisions involving the functions and powers of Congress, the Supreme Court, and the President and federalism. Prerequisite: PLSC 2003.

PLSC4263 The U.S. Constitution II (Irregular) United States Supreme Court decisions interpreting the political, economic, and civil rights of individuals and groups. Prerequisite: PLSC 2003.

PLSC4283 Federalism and Intergovernmental Relations (Even years, Sp) Analysis of changes in intergovernmental relations in the American federal system. Discussions will focus on political, economic, and administrative aspects of policy changes of the pre- and post-Reagan eras.

PLSC4293 African American Politics (Fa) This is a survey course designed to provide students with a comprehensive overview of African American political participation in the United States. In addition to analyzing important events in African American Politics, the course attempts to explain evolving patterns of political participation in Black America. (Same as AAST 3293, PLSC 3293)

PLSC4303 History of Political Parties in the U.S. 1789-1896 (Even years, Fa) Origin and development of the American party system from the implementation of the Constitution to the election of McKinley. (Same as HIST 4503)

PLSC4313 History of Political Parties in the United States Since 1896 (Odd years, Sp) Response of the party system to America’s emergence as an industrial nation and world power from the election of 1896 to present. (Same as HIST 4513)

PLSC4323 Racial Identity, Politics, and Public Policy (Even years, Sp) Examines how race and perceived racial differences affect political discourse, mobilization, representation, and political outcomes. Prerequisite: PLSC 4293 or AAS 1003 or 3233 or 3243.

PLSC4333 Southern Politics (Sp) Evaluates the significance of the southern region within the national political scene, as evident in its geographical, historical, and political significance of the region. Explores the various groups within the region that continue to fight for political influence and power.

PLSC4373 Political Communication (Even years, Sp) Study of the nature and function of the communication process as it operates in the political environment. (Same as COMM 4373)

PLSC4373 Gender and Politics (Irregular) (Sp) Analyzes the significance of gender in politics. Includes discussion of the women’s movement and feminist theory, but emphasizes the content and process of public policy as it relates to women and men in the U.S. but will be applied to comparative topics. Prerequisite: PLSC 2003 or PLSC 2013.

PLSC4593 Islam and Politics (Fa) Compares contemporary Islamic political movements. Seeks to explain causes, debates, agendas, and strategies of Islamists in the political realm. Addresses sovereignty, the rule of law, visions of the good state and society, and relations between nationalism, religion and political development. Focus on Middle East with comparative reference to other cases.

PLSC4803 Foreign Policy Analysis (Irregular) Comparative analysis of foreign policy, with attention paid to explanations at a variety of levels, such as the individual, group, organization, state, and international system. Prerequisite: PLSC 4253.

PLSC4813 Politics of the Cold War (Even years, Sp) Examines the cold war from different perspectives; nature of the international system during the cold war; American and Soviet roles in the cold war; determinations; impact of the cold war on the economy, culture, and society; end of the cold war; the post-cold war world.

PLSC4823 Foreign Policy of East Asia (Sp) This course provides an introduction to the international and domestic political scenes in the major East Asian states, China and Japan. Key topics include: China and Japan’s interaction with the world political and economic systems; domestic sources of international behavior and major dimensions of foreign policy in the 1980s and 1990s.

PLSC4833 International Political Economy (Fa) This course provides an analysis of the interaction between politics and markets in the world economy. Its central objective is to illustrate the political and state aspects of the world economy and how they have shaped and been shaped by the development of the global economy.

PLSC4843 The Middle East in World Affairs (Sp) An analysis of geo-political and socio-economic characteristics of Middle Eastern societies and their impact on world economic and political order. Special attention to such issues as the Arab-Israeli conflict, the promotion of lasting peace in the region, impact of oil on world politics, the involvement of superpowers, rehabilitation of Palestinian refugees and the role of the United Nations.

PLSC4853 International Norms and Corporate Social Responsibility (Sp) This course focuses on the interplay between global, national and corporate social responsibility. Emphasis is given to the effects of why and how norms prevail and why norms emerge will be observed from a business vantage point. Pre- or corequisite: PLSC 2003 or PLSC 2013.

PLSC4863 Inter-American Politics (Irregular) An analysis of the political themes, regional organization, and hemispheric relations that constitute the inter-American system, with special emphasis on conflict and cooperation in the hemispheric policies of the American republics. Prerequisite: Junior standing.

PLSC4933 African American Political Ideology (Odd years, Sp) A survey course designed to identify and examine characteristics functions and status of several dimensions of black political ideology/thought. (Same as AAST 4933)

PLSC498V Senior Thesis (Sp, Fu, Su) (1-6) Senior Thesis (Sp, Fu, Su) (1-6) Not part of the 30 hours requirement for the major. May be repeated for up to 6 hours of degree credit.

PLSC5103 Human Behavior in Complex Organizations (Fa) Review of the fundamental literature and systematic analysis of theories of organization behavior, leadership, motivation, role ambiguity and consequences of organizational behavior in public and private organizations. Prerequisite: Graduate standing.

PLSC5113 Seminar in Human Resource Management (Fa) Intensive study of public personnel policies and practices, including legal foundations, classification and compensation philosophies, human resource development, and employee relations, employment policies and morale, employee relations and organization. Prerequisite: Graduate standing.

PLSC6123 Public Budgeting and Finance (Fa) Focuses on
The budgeting process and governmental fiscal policy formulation, adoption, and execution. Prerequisite: Graduate standing.

PLSC5873 Research Seminar in Controversial and Contemporary Problems (Fa) Seminar with concentrated reading in selected and specialized areas of international current international relations. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

PLSC5843 International Legal Order (Fa) Analysis of distinctive characteristics of contemporary international law. Topics include role of legal order in controlling the use of force in international relations and the impact of social and political environment on growth of international law and relations among international political systems. Prerequisite: Graduate standing.

PLSC590V Directed Readings in Political Science (Sp, Su, Fa) (1-3) Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

PLSC5913 Research Methods in Political Science (Fa) Methods relevant to research in the various fields of political science. Required of all graduate students in political science. Prerequisite: Graduate standing.

PLSC592V Internship in Political Science (Sp, Su, Fa) (1-6) Internship in a local, state, regional, or federal agency. Paper required on a significant aspect of internship experience. Prerequisite: Graduate standing.

PLSC593V Special Topics (Sp, Su, Fa) (1-3) Topics in political science not usually covered in other courses. Prerequisite: Graduate standing. May be repeated for up to 3 hours of degree credit.

PLSC595V Research Problems in Political Science (Sp, Su, Fa) (1-3) Prerequisite: Graduate standing. May be repeated for up to 3 hours of degree credit.

PLSC5983 Mixed Methods Research Design (Sp) An advanced overview of a particular type of multi-point research design. Mixed methods research combines quantitative and qualitative research strategies in a single research project.

PLSC600V Master’s Thesis (Sp, Su, Fa) (1-6) Supervised work experience with private or public government organizations to introduce students to professional areas of work in political science. Prerequisite: Junior standing. May be repeated for up to 6 hours of degree credit. (Irregular)

PLSC620V Internship in Political Science (Sp, Su, Fa) (1-6) Internship in a local, state, regional, or federal agency. Paper required on a significant aspect of internship experience. Prerequisite: Graduate standing.

PLSC692V Internship in Political Science (Sp, Su, Fa) (1-6) Internship in a local, state, regional, or federal agency. Paper required on a significant aspect of internship experience. Prerequisite: Graduate standing.

PLSC695V Research Problems in Political Science (Sp, Su, Fa) (1-3) Prerequisite: Graduate standing. May be repeated for up to 3 hours of degree credit.

PLSC6983 Mixed Methods Research Design (Sp) An advanced overview of a particular type of multi-point research design. Mixed methods research combines quantitative and qualitative research strategies in a single research project.

PLSC699V Dissertation (Sp, Su, Fa) (1-12) Dissertation. Required of all graduate students in political science. Prerequisite: Graduate standing. May be repeated for up to 12 hours of degree credit. (Irregular)

PLSC821 Seminar in Political Science (Sp, Su) (1) Seminar in political science. May be repeated for up to 6 hours of degree credit.
POSC500V Special Problems (Sp, Su, Fa) (1-6) Work in special problems of poultry industry. Prerequisite: Graduate standing.

POSC501V Special Topics in Poultry Sciences (Irregular) (1-4) Topics not covered in other courses or a more intensive study of specific topics in poultry science. Prerequisite: Graduate standing. May be repeated for credit.

POSC502V Dr. J. Contaminants (Irregu- lar) During this course, the student will learn basic concepts of food toxicology, study the different physiological processes involved in foodborne intoxications, and learn about potential health problems associated with exposure to these com- pounds. Prerequisite: Graduate study.

POSC5123 Advanced Animal Genetics (Even years, Fa) Specialized study of animal genetics. Lecture 3 hours per week. Prerequisite: POSC 3123 or ANSC 3123. (Same as ANSC 5123)

POSC5143 Biochemical Nutrition (Even years, Fa) Inter- relationship of nutrition and physiological chemistry; structure and metabolism, and the utilization of the vitamins. Prerequisite: Six hours of chemistry, not including CHM 1813. (Same as BIOL 5143)

POSC5152 Protein and Amino Acid Nutrition (Even years, Sp) Students will be introduced to the basic processes of pro- tein digestion, amino acid absorption, transport, metabolism, and utilization. Prerequisite: Six hours of chemistry, not including CHM 1813. (Same as ANSC 5152)

POSC5233 Value Added Muscle Foods (Even years, Sp) An in-depth coverage of the most important diseases of poultry with a focus on understanding mechanisms of pathogenesis, diagnostic techniques and principles of prevention. Lecture/ discussion 2 hours per week. Prerequisite: POSC 3233.

POSC5243L Advanced Analytical Methods in Animal Sci-ences Laboratory (Fa) Introduction to theory and applica- tion of current advanced analytical techniques used in animal research. Three 3-hour laboratory periods per week. (Same as BIOL 5243L)

POSC5373M Molecular Analysis of Foodborne Pathogens (Fa) Course topics will include molecular detection and iden- tification of foodborne pathogens, the molecular response of foodborne pathogens to their environment, bacterial immune- ic approaches, and analysis of complex microbial communi- ties. Lecture/discussion 3 hours per week.

POSC5901 Graduate Seminar (Sp, Fa) Critical review of the current literature pertaining to the field of poultry science. Oral reports. Recitation 1 hour per week. Prerequisite: Senior standing.

POSC5923 Brain and Behavior (Fa) Covers cellular through neural networks and comparative aspects of avian brain. Topics include ion channels, membrane and action potential properties, synaptic integration, neurotransmitters, major brain regions of mammals and birds, sensory and autonomic nervous systems, neuroendocrinology, and control by the brain of critical functions and behavior. Lecture 3 hours per week; Laboratory 3 hours per week (for first 8 weeks of semester). Pre- or Corequisite: CHEM 3813. Corequisite: Drill component. Prerequisite: POSC/ANSC 3032 and/or POSC/ANSC 3042, or PSYC 2033, or BIOL 2213, or BIOL 2443, or BIOL 2533.

POSC5932 Cardiac Physiology of Domestic Ani- mals (Fa) Cardiovascular physiology, including mechanisms of heart function and circulation, and blood vessel mechanisms. Neuronal and endocrine systems that regulate the cardiovascular system in domestic animals and poultry. Lecture 3 hours; drill 1 hour per week (for second 8 weeks of semester). Pre- or Corequisite: CHEM 3813. Coreq- uisite: Drill component. Prerequisite: POSC/ANSC 3032 and/or POSC/ANSC 3042, or PSYC 2033, or BIOL 2213, or BIOL 2443, or BIOL 2533.

POSC5932L Endocrine Physiology of Domestic Animals (Fa) Endocrine physiology, including mechanisms of hormone secretion, function, and regulation. Mechanisms associated with the endocrine system will be discussed for domestic animals and poultry. Lecture 3 hours; drill 1 hour per week (for second 8 weeks of semester). Pre- or Corequisite: CHEM 3813. Corequisite: Drill component. Prerequisite: POSC/ANSC 3032 and/or POSC/ANSC 3042. (Same as ANSC 5942)

POSC5952 Respiratory Physiology of Domestic Animals (Sp) Respiratory physiology, including mechanisms of lung function and gas exchange. Mechanisms associated with the interaction of the respiratory system with other systems of the body in domestic animals and poultry will be discussed. Lecture 3 hours; drill 1 hour per week for first 8 weeks of semester. Pre- or Corequisite: CHEM 3813. Corequisite: Drill compo- nent. Prerequisite: POSC/ANSC 3032 and/or POSC/ANSC 3042. (Same as ANSC 5952)

POSC5962 Gastrointestinal/Digestive Physiology of Do- mestic Animals (Fa) Gastrointestinal and hepatic physiology, the digestive system; the function of enzymes and absorption of nutrients. May be emphasis on cellular control mechanisms in domestic animals and poultry. Lecture 3 hours; drill 1 hour per week (for sec- ond 8 weeks of semester). Pre- or Corequisite: CHEM 3813. Corequisite: Drill component. Prerequisite: POSC/ANSC 3032 and/or POSC/ANSC 3042. (Same as ANSC 5962)

POSC5972 Renal Physiology of Domestic Animals (Sp) Renal physiology, including mechanisms of renal clearance with emphasis on cellular control mechanisms in domestic animals and poultry. Lecture 3 hours; drill 1 hour per week (for second 8 weeks of semester). Pre- or Corequisite: CHEM 3813. Corequisite: Drill component. Prerequisite: POSC/ANSC 3032 and/or POSC/ANSC 3042. (Same as ANSC 5972)

POSC590V Thesis (Sp, Su, Fa) (1-4) Prerequisite: Graduate standing.

POSC5934 Vitamin Nutrition in Domestic Animals (Even years, Sp) The vitamins required by domestic animals with emphasis upon their metabolism, physiological functions, and consequences of failure to meet the require- ment of the animal. Lecture 3 hours per week. Prerequisite: (ANSC 3143 or POSC 4343) and CHEM 3813. (Same as ANSC 6343)

POSC700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Graduate standing.

POSC5923H Honors General Physiology (Sp, Fa) An introduction to the field of Physiology, including the investigation of the biological bases of behavior; learning and cognitive processes; developmental and social psychology; and personality, psychopathology, and the treatment of psychological disorders. Students will be expected to complete a research requirement. Prerequisite: PSYC 2013. (Same as ANCC 5923H)

POSC5923H Honors General Physiology (Fa) An introduction to the field of Physiology, including the investiga- tion of the biological bases of behavior; learning and cognitive processes; developmental and social psychology; and personality, psychopathology, and the treatment of psychological disorders. Students will be expected to complete a research requirement. Prerequisite: PSYC 2013. (Same as ANCC 5923H)

POSC5972 Psychology of Learning (Sp) Theories and representative research on basic principles of learning and memory in both animals and humans. Prerequisite: Six hours of psychology, not including PSYC 2013.

POSC5973 Psychology of Learning (Fa) Theories and representative research on basic principles of learning and memory in both animals and humans. Prerequisite: Six hours of psychology, not including PSYC 2013.

POSC5973 Psychology of Learning (Sp) Theories and representative research on basic principles of learning and memory in both animals and humans. Prerequisite: Six hours of psychology, not including PSYC 2013.

POSC5973 Psychology of Learning (Fa) Theories and representative research on basic principles of learning and memory in both animals and humans. Prerequisite: Six hours of psychology, not including PSYC 2013.

POSC5973 Psychology of Learning (Sp) Theories and representative research on basic principles of learning and memory in both animals and humans. Prerequisite: Six hours of psychology, not including PSYC 2013.

POSC5973 Psychology of Learning (Fa) Theories and representative research on basic principles of learning and memory in both animals and humans. Prerequisite: Six hours of psychology, not including PSYC 2013.

POSC5973 Psychology of Learning (Sp) Theories and representative research on basic principles of learning and memory in both animals and humans. Prerequisite: Six hours of psychology, not including PSYC 2013.
Eighteen hours of psychology including a grade of at least a C in PSYC 3073; senior standing. May be repeated for up to 6 hours of degree credit. Prerequisite: PSYC 5043; enrollment in the Psychology graduate program.

PSYC5023 Neuropsychological Assessment (Irregular) Introduction to the principles, techniques, and tools of assessment in clinical neuropsychology. Includes training in the interpretation, integration, and reporting of results. Prerequisite: PSYC 5043; enrollment in the Psychology graduate program.

PSYC5033 Psychopathology (Fa) Psychological and somatic factors contributing to pathological behavior. Interrelations of these factors will be studied in terms of components leading to differential states. Prerequisite: PSYC 3023; enrollment in the Graduate Program in Psychology, or consent.

PSYC5043 Assessment of Intellectual and Cognitive Abili- ties (Fa) Training in the theory, administration, and interpretation of individual tests of intelligence and mental ability. Prerequisite: PSYC 4053; enrollment in the Psychology Graduate Program.

PSYC5053 Advanced Personality Assessment and Clinical Diagnosis (Fa) Guidelines for using standardized instruments and structured interviews in the diagnosis and clinical assessment of major psychological disorders. Includes training in the formulation and reporting of results. Prerequisite: PSYC 5043 and PSYC 5163.

PSYC5063 Advanced Social Psychology (Sp) Theory, methodology, and contemporary research in the major areas of social psychology. Topics include attitude theory and measurement, group processes, social and cultural factors. Prerequisite: PSYC 5073.

PSYC5073 Introduction to Clinical Practice: Core Skills and Ethical Guidelines (Sp, Fa) An introduction to clinical practice and research, emphasis on ethical considerations and psychotherapeutic techniques. Pre-requisite: PSYC 5063.

PSYC5080 Observational Practicum (Sp, Su, Fa) Observation of senior therapists in the provision of psychodiagnostic and psychotherapeutic techniques. Pre-or Corequisite: Psychology Ph.D. students only. May be repeated for up to 6 hours of degree credit.

PSYC5103 Theories of Learning (Fa) Major concepts in each of the important theories of learning. Prerequisite: PSYC 4073.

PSYC5123 Cognitive Psychology (Even years, Sp) Contemporary theories and research on human information processing including topics such as memory, language, thinking, and problem solving.

PSYC5133 Inferential Statistics for Psychology (Fa) Inferential statistics, including representative parametric tests of significance, b) theoretical principles on analysis of variance, covariance, and component variance estimators as applied to psychological research. Prerequisite: PSYC 2013 or STAT 2013.

PSYC5143 Advanced Descriptive Statistics for Psychology (Fa) Descriptive techniques followed by a survey of representative nonparametric tests of significance. Major emphasis on advanced analysis of variance and theoretical considerations. Prerequisite: PSYC 5133.

PSYC5153 Advanced History and Systems of Psychology (Fa) Advanced examination of the concepts, methods, and systems which have contributed to the development of modern psychology.

PSYC5163 Personality: Theory & Disorder (Sp) An introduction to empirically based theories of personality and disorder with an emphasis on clinical application and intervention. Prerequisite: Enrollment in the Psychology graduate program or consent.

PSYC5253V Research Practicum (Sp, Fa) (1-3) Presentation, evaluation, and discussion of on-going research proposals. Required of all experimental graduate students in the first 2 years of their program.

PSYC5313 Introduction to Clinical Science: Research Design and Ethical Guidelines (Fa) Provides a) guidelines for designing and conducting empirical research in clinical psychology, b) ethical principles that regulate clinical research, and c) supervised opportunities to develop a clinical research proposal. Prerequisite: Enrollment in the Psychology graduate program.

PSYC5620V Master's Thesis (Sp, Su, Fa) (1-6) Research in psychology. Directed study of problems in the discipline. May be repeated for credit.

PSYC5602V Seminar: Teaching Psychology (Sp, Fa) (1-3) Survey of the literature on teaching psychology in college. Includes: planning the course, method, examining and advising students in the teaching assistant role, and covering special topics in classroom techniques. Prerequisite: PSYC 5607V.

PSYC5607V Clinical Practicum III (Sp, Fa) (1-3) Provides supervised experience in the application of the more complex and lesser known psychodiagnostic techniques and training and experience in psychotherapeutic techniques with the more severe functional disorders. Level of responsibility and independence on credit hour 5607V. Prerequisite: PSYC 5073; enrollment in the Psychology graduate program.

PSYC5608 Clinical Supervision and Consultation (Sp, Fa) An introduction to empirically based models of clinical super- vision and professional consultation for clinical psychologists. Prerequisite: PSYC 607V; enrollment in the Psychology graduate program.

PSYC6069V Clinical Grand Seminar (Sp, Fa, Su) (1-3) Provides intensive coverage of specialized topical areas to all graduate students. May be repeated for up to 3 hours of degree credit.

PSYC6111V Individual Research (Sp, Su, Fa) (1-18) May be repeated for up to 18 hours of degree credit. Prerequisite: PSYC 6133.

PSYC6133 Advanced Behavioral Neuroscience (Fa) Exam- ination of the biological basis of behavior, with emphasis on underlying neural mechanisms.

PSYC6161 Seminar in Psychotherapy (Sp) A conceptual overview of psychotherapy, with an emphasis on a) common mechanisms, and b) cognitive and interpersonal approaches. Prerequisite: PSYC 5033.

PSYC6203 Behavioral Therapy (Even years, Fa) Provides clinical experience and training in the major behavior modification technique. Includes also a critical evaluation of therapy, research, and issues in the area. Prerequisite: Enrollment in the Psychology graduate program.

PSYC6223 Diversity Issues in Clinical Psychology (Sp) The impact of clients’ diversity on assessment, treatment, and research in clinical psychology. Broad coverage with an em- phasis on implications for clinical practice. Prerequisite: Enrollment in the Psychology graduate program.

PSYC6323 Seminar in Developmental Psychology (Odd years, Fa) Discussion of selected topics in the area of human development. Emphasis will be on a review of current theory and empirical research. Topics selected for discussion could range from early development (child psychology), to later de- velopment (psychology of adulthood and aging-gerontology), to current attempts to integrate the field (life-span develop- mental psychology).

PSYC6343 Seminar in Quantitative Methods (Irregular) Discussion of selected mathematical approaches to theorizing and research in psychology. Emphasis will be on generaliza- tion of a good approach across several areas of psy- chology. Hence, while each area must be treated in reason- able depth, current thinking and research spanning more than one content area will be stressed.

PSYC6353 Seminar in Learning/Memory/Cognition (Odd years, Sp) Discussion of selected topics in learning, memory, or cognition. Emphasis on current theory and empirical re- search. Topics selected for discussion may be in the areas of learning, memory, or cognition. Prerequisite: PSYC 6343.

PSYC6573 Seminar in Personality and Social Psychology (Sp) Discussion of selected topics in social psychology and personality. Current theoretical positions and recent research findings and empirical research will be discussed. Emphasis will be given to areas of intrapersonal processes, interpersonal processes, group processes or any of various areas of personality.

PSYC6643 Seminar in Physiological Psychology (Odd years, Sp) Discussion of selected topics in physiological psy- chology. Emphasis will be on a review of current theory and empirical research. Each offering of the seminar will examine the biological basis of a specific aspect of behavior, utilizing both animal and human data.

PSYC6989V Field Work (Sp, Summer, Su) (1-3) Provides academic credit for field work in multidisciplinary setting, involving super- vised experiences in assessment and psychotherapy. May be repeated for credit.

PSYC699V Clinical Psychology Internship (Sp, Su) (1-3) Supervised experience in a multidisciplinary setting of assessment and psychotherapy. May be repeated for credit.

PSYC700V Doctoral Dissertation (Sp, Su, Fa) (1-18) Prerequisite: Candidacy. May be repeated for up to 18 hours of degree credit.
course includes identification and exploration of motivating factors related to various traditional and contemporary leisure experiences. The course provides an analysis of diverse populations.

**RESM253H Honors Leisure and Society (Sp, Fa)** This course is an examination of leisure and its effect on society. Course content includes identification and exploration of motivating factors related to various traditional and contemporary leisure experiences as it occurs across diverse populations.

**RESM3023 Sport Management Fundamentals (Fa)** This course is designed to present an overview of the fundamentals of sport management in professional and intercollegiate sport, as well as issues facing sport organizations and how management techniques can be applied to solve business problems. A description of career opportunities in sport will be presented, with an emphasis on the role of various professional and related sport organizations.

**RESM3027 The Intramural Sports Program (Odd Years, Fa)** Historical development, aim and objectives, organization, administration, units of competition, program of activities, scheduling, making rules, regulations, and rules, and special administrative problems.

**RESM3029 Sport Management (Fa)** Deals primarily with high school athletics and considers historical development, objectives, administration, staffing, facility evaluation, facilities management, local organization and administration, staff program, finances, inventories, facilities and equipment, safety, legal aspects, awards, publicity, and public relations.

**RESM3463 Sports Facilities Management (Su)** Considers basic elements and procedures in the planning, design, construction, operation, and maintenance of sport facilities; management considerations in conducting various types of events. **RESM460W Workshop (Irregular) (1-3)** May be repeated for up to 3 hours of degree credit.

**RESM457V Internship (Irregular) (1-3)**
**RESM813 Principles of Recreation and Sport (Su)** Considers history, philosophy, current trends, basic issues, and fundamental principles of recreation and sport. Using these principles as basic criteria, students make critical appraisals of current practices in organization and administration of recreation programs and sport programs. Emphasis on leadership development, management, and evaluative procedures.

**RESM8533 Recreation and Sport for Special Populations (Irregular)** Skills, knowledge, and concepts within recreation and sport which are appropriate to planning and implementing recreation and sport programs and services for the handicapped.

**RESM8543 Tourism (Fa)** Explores major concepts of tourism to discover what makes tourism work, how tourism is organized, and its social and economic effects.

**RESM8553 Strategic Organizational Design in Recreation and Sport Management (Sp)** Nature, background, significance, ethical, social, professional, and community issues. Attention is given to departmental organization, administrative practices, program financing, personnel, safety, and legal aspects.

**RESM8573 Leadership in Recreation and Sport Management Services (Su)** Considers research, theory, and practical applications of leadership principles utilized in the provision of recreation and sport management services. Focus is on motivation, attitude, communication, group dynamics, and problem-solving.

**RESM8583 Recreation and Sport Services Promotion (Su)** Examines specific strategies for promoting recreation and sport programs in the local community.

**RESM8593 Public and Private Finance in Recreation and Sport Management (Fa)** Develops an understanding of both public and private finance management for students in public and private recreation and sport programs in the local community.

**RESM8600V Master's Thesis (Sp, Su, Fa) (1-18)** May be repeated for up to 18 hours of degree credit.

**RESM8605V Independent Study (Sp, Su, Fa) (1-3)** May be repeated for up to 3 hours of degree credit.

**RESM8912 Directed Reading in Recreation and Sport (Sp, Su, Fa) (1-18)** Critical analysis of literature in the area of recreation and sport.

**RESM9133 Issues in RESM (Irregular)** A review of the significance, demographic, behavioral, developmental, and technological issues that influence health, kinesiology, and recreation and sport management programs. Pre- or Coreq: for doctoral level students only.

**RESM9160V Graduate Internship (Sp, Su, Fa) (1-15)** A practicum experience in a wilderness environment. The course will include a canoe trip through the wilderness, and skill training in such areas as orienteering and rock climbing; and leadership development in interpersonal and processing skills. The graduate portion of the course is geared toward leading and trip planning experiences for taking college age and older students into remote areas.

**RESM4003H Honors Research and Evaluation in Recreation and Sport Management (Sp)** An introduction to the applied methods and techniques of research and evaluation in recreation and sport services. General consideration given to research applications such as needs assessment, program evaluation, and marketing studies. Emphasis placed on the logic underlying the research process. Prerequisite: Senior standing and RESM 1003, or instructor consent.

**RESM4043 Research and Evaluation in Recreation and Sport Management (Sp)** An introduction to the applied methods and techniques of research and evaluation in recreation and sport services. General consideration given to research applications such as needs assessment, program evaluation, and marketing studies. Emphasis placed on the logic underlying the research process.

**RESM404V Internship (Sp, Su, Fa) (1-12)** This experiential based course requires 40 hours per week of work in an approved agency for a full semester. It is recommended that students register for the summer session after completion of their course work. Prerequisite: RESM 3973.

**RESM4411 Pre-Internship Preparation (Fa)** Enables student preparation for internship experiences and eventual employment. Course will assist students in preparation of resumes; provide an overview of job search and application skills, as well as other requisites for entering the professional workforce. Prerequisite: RESM 1003 and Senior standing.

**RESM480W Workshop (Irregular) (1-3)** May be repeated for up to 3 hours of degree credit.

**RESM5003G Independent Research (Fa)** Gives students entering a recreation and sport degree program with no course background in recreation and sport the necessary understanding of the recreation and sport field. This course will not count toward a graduating student's degree or course content designates a course of study that best meets his/her goals. Prerequisite: RESM 1003 or instructor consent.

**RESM600V Master's Thesis (Sp, Su, Fa) (1-18)** May be repeated for up to 18 hours of degree credit.

**RESM645V Directed Reading in Recreation and Sport (Sp, Su, Fa) (1-18)** Graduate teaching experience in the rehabilitation counseling curriculum. Under the supervision of a faculty member, student will participate in the development of syllabi, course materials and examinations. Will team teach graduate rehabilitation counseling course as needed.

**RESM675V Internship (Sp, Su, Fa) (1-18)** Graduate teaching experience in the rehabilitation counseling curriculum. Under the supervision of a faculty member, student will participate in the development of syllabi, course materials and examinations. Team teach graduate rehabilitation counseling course as needed.
SCWK2133 Introduction to Social Work (Sp, Su, Fa) Introduction to social work as a profession and to social welfare institutions from the perspective of the generalist, entry level social worker. Emphasis on empowerment function of social work. An introduction to basic information related to human diversity and social work. Provides content on differences and similarities in the experiences, needs, and beliefs of people distinguished by race, ethnicity, culture, class, gender, sexual orientation, religion, physical or mental ability, age or national origin. Prerequisite: Social Work major or minor.


SCWK3963 Child Welfare: 21st Century Perspectives (Sp, Fa) Study of social welfare needs of children with special attention to methods and standards of care. Cultural competence and family-centered practice are emphasized. Prerequisites: SCWK 399VH Honors Course (1-18) Prerequisite: Junior standing. May be repeated for up to 12 hours of degree credit.

SCWK405V Special Topics in Social Work (Irregular) Comprehensive study of various topics of importance in contemporary social welfare and social work practice. Prerequisite: Junior standing. May be repeated for credit.

SCWK4073 Social Work Research and Technology I (Sp, Fa) An overview of forms and sources of social work research including existing social data, techniques for collecting original social data, and techniques of organization, interpretation, and presentation of data. Students will also become proficient in the use of current technology for social work research and practice. Prerequisite: RUSS 2013 or equivalent.

SCWK4093 Human Behavior and the Social Environment II (Sp, Fa) Formerly SCWK 3103) This course applies the basic framework for creating and organizing knowledge of human behavior and the social environment to the understanding of individual, family, group, organizational, community, and global systems. Attention is given to discrimination, oppression, the impact of technology, and poverty at each system level. Prerequisite: SCWK 4093 and SCWK 4153.

SCWK4143 Addiction and the Family (Sp) Introduction to the biophysical basis of chemical and behavior compulsions with special focus on family impacts. Childhood development and addictive family systems are examined. Social work intervention with substance abusing families is highlighted.

SCWK4153 Social Welfare Policy (Sp, Fa) Formerly SCWK 3113) Describes and analyzes the policies and services rendered by local, state, and national governmental agencies as well as the policy implications for social work practice. Students prepare to advocate social policy changes designed to improve social conditions, promote social and economic justice, and to encourage social change. Prerequisites: COMM 1313, PSYC 2033, SOC 2013, SCWK 2133, and SCWK 3190, and BIOL 1543, or ANTH 1015, or ANTH 2105.

SCWK4163 Social Work With Elders (Sp, Fa) Survey of theories of gerontology, service programs and unmet needs for older adults. Prerequisites: SCWK 4093, SCWK 4073, SCWK 4153.

SCWK4233 Seminar: Children and Families (Fa) An examination of selected current issues in the field of children and family services through discussion, individual study, and interaction with professionals in the field. Prerequisite: SCWK 4093 and SCWK 4153.

SCWK4333 Social Work Practice I (Sp, Fa) This is the first in a sequence of practice courses introducing students to the generalist approach to micro social work. This course focuses on developing a solid foundation for practice with individuals, including learning basic communication and helping skills, values, principles, and the connection of theory to practice. Pre- or Corequisite: SCWK 4103. Prerequisite: SCWK 4093 and SCWK 4153.

SCWK4343 Social Work Practice II (Sp, Fa) This is the second course in the social work practice sequence, emphasizing theories, models, and techniques related to generalist practice. Corequisite: Advanced Practice Field Seminar (Sp, Fa). An integrative seminar to assist students in comparing their practice experiences, integrating knowledge acquired in the classroom, and expanding knowledge beyond the scope of the practice setting.

SCWK5003 Foundations of Culturally Competent Social Work Practice (Sp, Fa) The purpose of this course is the acquisition of basic conceptual frameworks in social work that emphasize values and ethics, knowledge, and skills necessary for cultural competence in work with individuals, families, groups, organizations, communities, and global contexts. A multi-systems approach is used to conceptualize and understand discrimination, oppression, the use of current technology for social work research and practice.

SCWK5213 Social Work Research and Technology II (Fa) This course includes content necessary for thesis proposal development. A significant component for this course focuses on using research tools to begin the thesis. The course provides an orientation to participatory action research, and to the scientific and systematic evaluation of service delivery and personal professional practice. Corequisite: SCWK 6000L and SCWK 6003. Prerequisite: Completion of year one for two-year students or summer semester for advanced standing students. Corequisites: SCWK 5143 Global Social and Economic Justice and Oppression (Fa) The role and responsibilities of the social work profession are examined in an international comparative context. Particular emphasis is given to social workers' responsibilities to advance global social justice, and to reduce human oppression through community, social, economic, and organizational development strategies. Prerequisites: SCWK 5003 or SCWK 5013.

SCWK5513 Children, Youth, and Family (Irregular) This course focuses on the development, revision, and impact of policy and practice in children, youth, and family services. Current issues in policy and practice will be examined. Students will interact with community agencies and utilize class assignments to advocate improvements in current policy and practice. Prerequisite: SCWK 5003 or SCWK 5013.

SCWK5516 Social Work Management, Administration and Supervision (Sp, Su) This course develops advanced skills in management, administration, and supervision in social work organizations. Emphasis is placed on developing leadership skills in ethics, budgeting, finance, resource development, social work education, social work research, social work evaluation, staff hiring, supervision and development, and the use of technology in organizational leadership, development, and maintenance. Prerequisite: Graduate standing and SCWK 5003 or SCWK 5013.

SCWK5611 Advanced Practice Field Seminar (Sp, Su) This course develops advanced skills in management, administration, and supervision in social work organizations. Emphasis is placed on developing leadership skills in ethics, budgeting, finance, resource development, social work education, social work research, social work evaluation, staff hiring, supervision and development, and the use of technology in organizational leadership, development, and maintenance. Prerequisite: Graduate standing and SCWK 5003 or SCWK 5013.
SCWK 5183 Advanced Practice with Individuals (Sp) This course develops advanced skills in social work practice on a micro level. Students are encouraged to analyze and compare practice models. They gain skills in selecting a practice model and in integrating multiple models based on client needs. Prerequisite: SCWK 5003 or SCWK 5013.

SCWK 5253 Social Policy and Practice in Aging (Fa) This course focuses on social work practice with, and policies for, older persons. Current, past, and future practices and policies for older persons across systems and the life course are explored. Emphasis is placed on the influences of personal, social, economic, and cultural diversity on the well-being of older persons. Prerequisite: SCWK 5003 or SCWK 5013.

SCWK 5253 Advanced Practice and Policy in Mental Health (Fa) This course prepares students to assess mental illness, plan intervention strategies with clients from a strengths perspective, and understand mental health programs and policies through which services are delivered. Differential diagnosis and the impact of socioeconomic status, gender, race, and sexual orientation on diagnosis and treatment decisions are addressed. Prerequisite: SCWK 5003 or SCWK 5013.

SCWK 5263 Spirituality in Social Work (Sp, Fa) This course provides a framework of knowledge, values, skills and experiences for spiritually-sensitive social work practice. It prepares students to respond competently and ethically to diverse spiritual and religious perspectives by using a comparative, critically reflective approach to content. Prerequisite: SCWK 3103 or SCWK 5003 or SCWK 5013.

SCWK 5343 Advanced Practice with Groups (Sp, Su) This course builds on the knowledge, skills, and values needed to assess and intervene effectively with populations seen in the social work practice of group therapy. This course examines group dynamics, life-course and strengths perspectives, and clients in need of individual and group skills in agency settings. Prerequisite: SCWK 5003 or SCWK 5013.

SCWK 5412 Foundation Field Seminar (Sp) A required course for MSW students without an accredited undergraduate degree in social work. The purpose of the seminar is to allow students to integrate classroom content with experiences in the field, to learn peer supervision and consultation, and to learn from the experiences of other students in the field. Corequisite: SCWK 5434.

SCWK 5434 Foundation Field Internship (Sp) This course is required of all graduate students entering the MSW program without an accredited undergraduate degree in social work. Minimum of 120 clock hours of agency-based professional social work practicum experience, supervised by a licensed MSW, is required. Corequisite: SCWK 5412. Prerequisite: SCWK 5003, SCWK 4333, SCWK 4073, SCWK 4093, and SCWK 5013.

SCWK 5442 Field Seminar III (Su) This seminar is required of all graduate students entering the MSW program with advanced standing. Students integrate classroom content with experience and peer supervision and consultation, and learn from the experience of other students in the field. Corequisite: SCWK 5444. Prerequisite: Admission to graduate program with advanced standing.

SCWK 5442 Field Seminar IV (Su) This course is required of all graduate students entering the MSW program with advanced standing. A minimum of 240 clock hours of agency-based professional social work practicum experience, supervised by a licensed MSW, is required. Corequisite: SCWK 5442. Prerequisite: Admission to graduate program with advanced standing.

SCWK 5986 Individual Study (Sp, Su, Fa) (1-4) Independent study designed to meet the particular needs of individual graduate students. May be repeated for up to 6 hours of degree credit. SCWK 6000L Thesis Laboratory (Sp, Su) This laboratory is required for completion of the thesis, which is developed through components of the graduate Research & Technology sequence. Other courses in the graduate curriculum provide support for the conceptualization and development of the thesis. This laboratory is taken in conjunction with SCWK 5073 and SCWK 6073. Corequisite: SCWK 5073 and SCWK 6073.

SCWK 6003 Advanced Practice I Using the Multi-System Life Course Perspective (Fa) In this first course of a two-semester sequence, students select a community problem, provide services to clients, and address the problem through policy analysis. A review of literature regarding theory and practice, paradigm analysis, development of a practice model, and implementation of micro and mezzo interventions in the field are examined. Corequisite: SCWK 6444, SCWK 6442, and SCWK 5073.

SCWK 6013 Advanced Practice II Using the Multi-System Life Course Perspective (Sp) In this second of a two-course sequence students provide services to social work clients. This course covers application of life course theory and multi-system and diversity perspectives. Issues across the life course are considered in addressing interventions through program development, a grant proposal submission, and implementation of macro interventions. Corequisite: SCWK 6073, SCWK 6454, and SCWK 6452. Prerequisite: SCWK 6003.

SCWK 6073 Social Work Research and Technology III (Sp) In this final research course, students collect and analyze data as planned in the thesis proposal submitted for the Research and Technology II. Course content focuses on the advanced research skills necessary to complete the thesis. Students write a research report of their findings and submit it for publication. Corequisites: SCWK 6013 and SCWK 6000L. Prerequisite: SCWK 5073.

SCWK 6442 Advanced Field Seminar I (Fa) The first of two advanced field seminars required of all students in the MSW program. The purpose of the seminar is to allow students to integrate classroom content with experiences in the field, to practice peer supervision and consultation, and to learn from the experiences of other students in the field. Corequisite: SCWK 6444. Prerequisite: SCWK 5412 or SCWK 5442.

SCWK 6444 Advanced Field Internship I (Fa) This is the first of two advanced field internships required of all graduate students in the MSW program. A minimum of 330 clock hours of agency-based professional social work practicum experience, supervised by a licensed MSW, is required. Corequisite: SCWK 6442. Prerequisite: SCWK 5434 or SCWK 5444.

SCWK 6452 Advanced Field Seminar II (Sp) This is the second of two advanced field seminars required of all graduate students in the MSW program. The purpose of the seminar is to allow students to integrate classroom content with experiences in the field, to demonstrate peer supervision and consultation, and to learn from the experiences of other students in the field. Corequisite: SCWK 6454. Prerequisite: SCWK 6442.

SCWK 6454 Advanced Field Internship II (Sp) This is the second of advanced field internships courses required of all graduate students in the MSW program. A minimum of 330 clock hours of agency-based professional social work practicum experience supervised by a licensed MSW is required. Corequisite: SCWK 6452. Prerequisite: SCWK 6442.

Sociology (SOCI)

SOCI 2103 General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change.

SOCI 2103H Honors General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change. Corequisite: SCWK 5412 or SCWK 5013. Prerequisite: SCWK 5400 or SCWK 5403.

SOCI 2103H Honors General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change. Corequisite: SCWK 5412 or SCWK 5013. Prerequisite: SCWK 5400 or SCWK 5403.

SOCI 2103H Honors General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change. Corequisite: SCWK 5412 or SCWK 5013. Prerequisite: SCWK 5400 or SCWK 5403.

SOCI 2103H Honors General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change. Corequisite: SCWK 5412 or SCWK 5013. Prerequisite: SCWK 5400 or SCWK 5403.

SOCI 2103H Honors General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change. Corequisite: SCWK 5412 or SCWK 5013. Prerequisite: SCWK 5400 or SCWK 5403.

SOCI 2103H Honors General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change. Corequisite: SCWK 5412 or SCWK 5013. Prerequisite: SCWK 5400 or SCWK 5403.

SOCI 2103H Honors General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change. Corequisite: SCWK 5412 or SCWK 5013. Prerequisite: SCWK 5400 or SCWK 5403.

SOCI 2103H Honors General Sociology (Sp, Su, Fa) Group relations, culture, personality, social institutions, collective behavior, and social change. Corequisite: SCWK 5412 or SCWK 5013. Prerequisite: SCWK 5400 or SCWK 5403.
SOCI 3301L, SOCI 3303, and SOCI 3313 or instructor consent.

SOCI 5083 Applied Qualitative Research (Fa) An introduction to research strategies including intensive interviewing, participant observational fieldwork, content analysis, historical analysis, and case study. Emphasizes understanding the practical aspects of designing and executing research involving multiple methods of data gathering and analysis. Prerequisite: Graduate standing.

SOCI 5083 Applied Quantitative Research (Fa) A statistical analysis of the theory, methods, and theories used in the study of the community. Prerequisite: Graduate standing.

SOCI 5123 Sociological Perspective on Social Psychology (Fa) The study of social structures and processes on the self and inter-action. Topics include exchange theory, role analysis, symbolic interactionism, social construction of reality, socialization, inter-personal relationships, organizational and leadership development, socialization, and stress. Prerequisite: Graduate standing.

SOCI 5153 Seminar in Social Inequality (Fa) Major theories of stratification; types of stratification systems, comparisons of modern and traditional systems; emerging trends. Prerequisite: Graduate standing.

SOCI 5153 The Community (Even years, Fa) A sociological analysis of the theory, methods, and theories used in the study of the community. Prerequisite: Graduate standing.

SOCI 5153 Sociological Perspective on Social Psychology (Sp) The study of social structures and processes on the self and inter-action. Topics include exchange theory, role analysis, symbolic interactionism, social construction of reality, socialization, inter-personal relationships, organizational and leadership development, socialization, and stress. Prerequisite: Graduate standing.

SOCI 5511L Space and Planetary Lab (Fa) Laboratory course in space sciences consisting of experiments in the five major areas of space and planetary sciences: planetary astronomy, planetary geology, planetary atmospheres, origin and evolution of life and orbital mechanics and astronautics. Introduces students enrolled in the graduate programs in space and planetary sciences.

SOCI 5323 Internship (Sp, Fa) Internship for graduate students in the space and planetary sciences graduate degree programs consisting of undergraduate and graduate programs in physics, biology, geosciences and mechanical engineering. Students conduct a phase of their research, normally for one month, at a national or industrial laboratory in North America or overseas.

SOCI 5611 Seminar (Sp, Fa) Seminars organized by the Arkansas-Oklahoma Center for Space and Planetary Sciences covering topics on the cutting edge of research in the field for graduate students who are a faculty member in the space and planetary sciences as part of graduate degree programs or concentrations in the graduate programs in physics, biology, geology, geography and mechanical engineering.

SOCI 5511L Space and Planetary Lab (Fa) A laboratory course in space sciences consisting of experiments in the five major areas of space and planetary sciences: planetary astronomy, planetary geology, planetary atmospheres, origin and evolution of life and orbital mechanics and astronautics. Introduces students enrolled in the graduate programs in space and planetary sciences.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.

SOCI 5351 Planetary Atmospheres (Irregular) Includes: the origins of atmospheres of the solar system, atmospheric processes, atmospheric dynamics, and space exploration. Prerequisites: SPAC 3103.
 movements. Prerequisite: SPAN 3113.
SPAN470V Special Topics (Irregular) (1-3) May be offered in a topic not specifically covered by courses otherwise listed. May be repeated for up to 6 hours of degree credit.
SPAN475V Special Investigations (Sp, Fa) (1-4) May be repeated for credit.
SPAN4883 Indigenous Literatures of Mesoamerica, the Andes and the Amazon (Irregular) A study of native oral narratives, literary texts and other writing forms in the Americas, from ancient times to the present, including the Andean Khipu, Mesoamerican Codices, and Amazonian mythic narratives. Prerequisite: SPAN 3113. (Same as SPAN 5883)
SPAN5203 Medieval Spanish Literature (Irregular) From the 'Jrarchas' to the Celestina.
SPAN5393 Golden Age Novel (Irregular) Major works of Spanish prose fiction from the 16th and 17th centuries, with close reading of major works.
SPAN5243 Golden Age Poetry and Drama (Irregular) History and development of those genres in the 16th and 17th centuries, with close reading of major works.
SPAN5253 Colonial Literature and Culture (Irregular) An introductory course to the history, culture and literature of colonial Spanish America from 1492 until 1810. The course will be taught in Spanish.
SPAN5273 Nineteenth Century Survey (Irregular) From Neoclassicism through Naturalism.
SPAN5283 Nineteenth Century Drama and Poetry (Irregular) From Realism to the Generation of 1898.
SPAN5343 Advanced Survey of Spanish Literature Since 1898 (Irregular) Intensive survey of the literature of Spain from the Generation of 1898 to the present. Prerequisite: graduate standing.
SPAN5393 19th Century Spanish American Literature (Irregular) Study of representative literary works from Independencia (1810) to 1900's. The course covers Neoclassicism, Romanticism, Realism/Naturalism, and Modernism and the role of literature in the nation-building process. The course will be taught in Spanish.
SPAN5403 Spanish American Theatre (Irregular) Historical examination of the theatre in Spanish America, with close analysis of representative plays and movements in the 20th century.
SPAN5433 Cervantes: Don Quijote (Irregular) A close read of Spain's greatest literary masterpiece.
SPAN5453 Drama and Literature (Irregular) This course examines several Latin American and Spanish texts and their film adaptations as well as the main film making trends in the Hispanic world.
SPAN5463 18th Century Spanish American Literature (Irregular) Critical survey of major movements and outstanding and representative works in 20th century prose and poetry, from the Mexican Revolution and the avant-garde to the contemporary novel.
SPAN5703 Special Topics (Irregular) May be offered in a subject not specifically covered by the courses otherwise listed. May be repeated for up to 6 hours of degree credit.
SPAN5773 Research Investigations (Irregular) (1-4) May be repeated for credit.
SPAN5773 Indigenismo Literature (Irregular) A study of 'indigenismo', an intellectual and literary tradition in Latin America examining the history of exploitation and marginalization of indigenous peoples. Readings include texts by Maritareguy, Icaza, Andrade, Asturias, Arguedas, Castellanos, and also 'indigenista' works in music and the plastic arts.
SPAN5774 Spain, Mexico, and Literatures (Irregular) A study of native oral narratives, literary texts and other writing forms in the Americas, from ancient times to the present, including the Andean Khipu, Mesoamerican Codices, and Amazonian mythic narratives. (Same as SPAN 4883)

Supply Chain Management (SPCM)

SPCM3443 Principles of Transportation (Fa) Examines forms of transportation and institutional factors that influence transportation decisions; regulation, public policy, other governmental variables reviewed in detail. An introduction to physical distribution's interaction with transportation explored. Prerequisite: ECON 2013 and ECON 2023 or ECON 2143.
SPCM5623 Purchasing and Inventory Systems (Fa) Management of the purchasing function, including organization, procedures, supplier selection and development, quality control, price determination, global sourcing, and methods of inventory control. Prerequisite: TLOG 5633.
SPCM6343 International Transportation and Logistics (Sp) Logistics activities in international business with special emphasis on transportation, global sourcing, customs issues, governmental influence, facility location in global environment and import-export opportunities. Special emphasis is placed on current events and their impact on the marketing and logistics activities of U.S.-based organizations. Prerequisite: ECON 2143 and ECON 2023.
SPCM6433 Transportation Carrier Management (Fa) Reviews special management techniques and analytical framework available for solving problems associated with transportation in transportations.
SPCM6453 Transportation and Logistics Strategy (Sp) Design and management of transportation and logistics systems for firms of varying size and different supply and market structures. Prerequisite: SPMM 3443 and SPCM 3613.

SPCM460V Special Topics in Logistics (Irregular) (1-3) Explores current events, concepts, and new developments in the field of logistics and transportation. Topics are selected by the Marketing and Transportation faculty for each semester in which the course is offered. May be repeated for up to 3 hours of degree credit.

SPCM5633 Retail and Consumer Products Supply Chain Management (Sp) Supply chain management is the integration of key business processes from end user through suppliers. The focus of this course is on the core processes that must be linked throughout the supply chain with an emphasis on logistics processes. Foundational topics in logistics and supply chain management will be covered.
SPCM6433 Transportation Strategies in the Supply Chain (Fa) This course focuses on the setting of objectives and the design of optimal transportation strategies and examines the means of implementing transportation strategies within different types of organizations.
SPCM6553 Global Logistics and Supply Management (Irregular) This course examines the planning and management of logistics, but emphasizes supplier selection and development, logistics options, strategic alliances, and performance measurement. Emphasis is placed on the integration of purchasing, materials management, and multi-firm logistics planning.
SPCM6433 Transportation Strategies in the Supply Chain (Fa) This course focuses on the setting of objectives and the design of optimal transportation strategies and examines the means of implementing transportation strategies within different types of organizations.
SPCM6553 Global Logistics and Supply Management (Irregular) This course examines the planning and management of logistics, but emphasizes supplier selection and development, logistics options, strategic alliances, and performance measurement. Emphasis is placed on the integration of purchasing, materials management, and multi-firm logistics planning.

SPCM6573 Modeling Retail & Consumer Products Logistics (Irregular) This is a more quantitative approach to measuring logistics performance, modeling tradeoffs and making decisions. Topics include forecasting, inventory management, network optimization, and transportation routing. Prerequisite: SPCM 5633.

Statistics (STAT)

STAT2023 Biostatistics (Sp) An introductory course in biostatistics emphasizing methods for collecting, graphing, and understanding data. Special emphasis is placed upon available methods for both exploratory and confirmatory data analysis. Particular attention is given to statistical methods for data sets with discrete variables. Pre- or Corequisite: MATH 2554.

Corequisite: Lab component.

STAT2033 Business Statistics (Sp) A problem-oriented course with applications from many fields. Emphasis on understanding the nature of statistical orderliness implied by probability laws. Statistical analysis is treated as a means of deciding on the face of uncertainty. Prerequisite: Math 1203 or 1204 each with a grade of "C" or better, or a score of at least 80% on the University of Kansas Mastery of Algebra Exam, or a score of at least 26 on the math component of the ACT exam, or a score of at least 600 on the math component of the SAT exam.

STAT2101 Introduction to Probability and Statistics (Sp, Su, Fa) A calculus-based introduction to the foundations of probability and statistics. Emphasis is placed upon understanding elementary properties of probabilities, events, statistical measurements and distributions, properties of random variables, law of large numbers, and their relationship to sampling and statistical inference. Prerequisite: MATH 2564.

STAT4001L Statistics Methods Laboratory (Sp, Fa) Emphasizes use of integrated statistical computer software to complement statistical methodology being covered concurrently in STAT 4003. Corequisite: STAT 4003.

STAT4003 Statistical Methods (Sp, Fa) Concepts of probability, descriptive statistics, Poisson, normal, and binomial distributions, use of fractional factorial replicated, and repeated measures. Prerequisite: STAT 4003.

STAT4103 Introduction to Probability Theory (Fa) Fundamental probability, distributional properties and random variables; expected value, moments, and generating functions; classic parametric families of distributions; central limit theorems, inequalities, and laws of large numbers. Prerequisite: MATH 1203 and 1204, and junior standing.

STAT4373 Experimental Design (Sp) Topics in the design and analysis of planned experiments, including randomized standing in mathematics or statistics, or departmental consent.

STAT5333 Analysis of Categorical Responses (Sp) A modern treatment, including extensions of classical probit analysis, multivariate logistic models, GSK model, loglinear models in analysis of multiway contingency tables, and nontemidimensional scaling. Prerequisite: STAT 5131, and graduate standing in mathematics or statistics, or departmental consent.

STAT5343 Stochastic Processes (Sp, Su, Fa) Markov chains, branching processes, birth-death processes, queuing theory with application. Prerequisite: STAT 5103, and graduate standing in mathematics or statistics, or departmental consent.

STAT5353 Methods of Multivariate Analysis II (Sp) Hotelling's T2 procedures, multivariate analysis of variance, discriminant function analysis and problems of classification, multidimensional scaling, and cluster analysis. Prerequisite: STAT 5313, and graduate standing in mathematics or statistics, or departmental consent.

STAT5383 Time Series Analysis (Sp, Su, Fa) Identification, estimation and forecasting of time series. Spectral analysis including the fast Fourier transform computational aspects are emphasized. Prerequisite: STAT 5103, and graduate standing in mathematics or statistics, or departmental consent.

STAT5413 Spatial Statistics (Fa) Applied spatial statistics, constructing variate spatial modeling (kriging), multivariate spatial modeling (cokriging), methods of estimation and inference, and spatial sampling designs. Special relevance to remote sensing. Prerequisite: STAT 5313, and graduate standing in mathematics or statistics, or departmental consent.

STAT505V Research in Statistics (Irregular) (1-4) Prerequisite: Graduate standing in mathematics or statistics, or departmental consent.

STAT6403 Topics in Statistics (Irregular) (1-3) Current state of the art on methodology in one of the topics: multivariate analysis, time series analysis, sequential analysis, factor analysis, or biostatistics. May be repeated for credit. Prerequisite: Graduate standing in mathematics or statistics, or departmental consent.
SUST1103 Foundations of Sustainability (Sp) Foundations of sustainability is an interdisciplinary course to introduce concepts and theories of sustainability at global, regional, and local levels. Emphasis is on four thematic areas: sustainability; social, natural, built and managed systems. The aim is to increase environmental literacy for engagement of sustainability into students’ own disciplines.

SUST2103 Applications of Sustainability (Fa) Applications of sustainability is an interdisciplinary course introducing data gathering, data analysis or interpretation, and synthesis of data applied to problems in sustainability. Students engage in hands-on, inquiry-based investigation of sustainability issues across four thematic areas: social systems, natural systems, built systems (Architecture & Engineering), and managed systems (Agriculture & Business).

SVEL1103 Introduction to Sustainability (Sp, Su, Fa) A capstone experience focused on service learning, research learning, or internship in sustainability. Student engagement in community service, research, or relevant work on sustainability through a summer internship or equivalent experience provides opportunities for students to apply sustainability theories and principles learned from prior course work toward advancing sustainability across society.

TEED1103 The Nature of Technology (Sp) Foundational study of the close relationship between nature, emerging technology, and human society throughout history.

TEED1603 Industrial Safety (Irregular) Study of accidents, the nature of STEM education disciplines, and the strategies used to deliver in-course provides an introduction to the foundations of STEM education in the elementary and secondary education disciplines and the strategies used to deliver in-course provides an introduction to the foundations of STEM education in the elementary and secondary level. Prerequisite: TEED 1103 and TEED 3103.

TEED4499/4497/5497 Internship (Sp, Su, Fa) (1-12) In an actual industrial setting, the student will study managerial functions, organizational practices, product design, production fabrication, routing, quality control, work schedules, industrial relations, and responsibilities of American industrial society. May be repeated for up to 15 hours of degree credit.

TEED5023 Creativity and Innovation in STEM (Su, Fa) This introductory course in technology and engineering education (TEED) focuses on the development and introduction of TEED activities to support science and mathematics instruction in the elementary classroom. Through hands-on, problem-based learning challenges, students will develop and understand of the engineering design process and the integration of STEM often used to solve real-world problems. Prerequisite: TEED 4033.

U A Clinton School (UACS)

UACS5501 V Special Topics in Public Service (Irregular) (1-3) Designed to cover specialized topics not usually covered in depth in regular courses. May be repeated for up to 6 hours of degree credit.

UACS5502 V Advanced Problems in Public Service (Irregular) (1-3) Provides an opportunity for individual study.

UACS5510 Ethical and Legal Dimensions of Public Service (Irregular) This course will provide an overview of the primary ethical principles and legal concepts that guide difficult decisions. Students who are seeking a greater understanding of ethical and legal theory will be combined with practical approaches to problem solving. Students will explore issues of economic, political, and social justice through case studies of current issues. Students will construct cases that are relevant to their own fields and present them to the class, identifying ethical and legal constraints on decision-making and implementation.

UACS5530 Communication Processes and Conflict Transformation (Irregular) The course is designed to increase the student’s personal communication effectiveness as a leader and public servant, and to enable students to understand the application of communication processes in the public arena.

UACS5531 Dynamics of Social Change (Irregular) The course deals with the elements of social change in a democratic society, and how these intersect with and are affected by economic and political forces. A critical examination of various justifications for promoting or discouraging social change will be undertaken, and the inherent strengths and weaknesses of these various approaches will be analyzed. Real-world cases will be used, and a cumulative assessment of the Lower Mississippi Delta.

UACS5523 Leadership in Public Service (Irregular) This course is designed to increase students’ knowledge of leadership concepts and exceptional experiences and that improve leadership skills and techniques, and enhance capabilities in organizational management. Students will assess their leadership strengths and weaknesses, as well as develop an action plan to match their career goals. They will improve knowledge and skills in building diverse teams, in initializing/managing change, in addressing uncertainty, and in leading non-governmental organizations. At the end of the course, students should be able to design leader- ship strategies to successfully address a spectrum of issues in public service and in promoting the community good.

UACS5533 Analysis for Decision Making In Public Service (Irregular) This course provides students with analytical tools that enhance their skills in diagnosing problems and formulating solutions within organizations and communities. Instruction will focus on evaluating community assets as a balance to assessing community need. Underlying values of social justice and collaborative problem-solving provide a benchmark for these activities. Students, working in teams, will be challenged to apply their skills to cases related to affordable housing and related activities.

Vocational and Adult Education (VAED)

VAED1011 Career Exploration (Sp) This course examines career exploration strategies using commonly accepted theory and practice. Students will learn career planning principles, understanding personal characteristics, exploring academic majors, researching occupations and creating a career plan.

VAED3401 Career Planning and Professional Development for Juniors and Seniors (Irregular) This course examines the career planning process for students pursuing careers in college-credentialed career opportunities. This is a key career planning course that can lead to career opportunities in the world of work and learning through service learning job search strategies that result in the development of a “Life After College” career plan.

WCOB1620 Local Government Finance (Sp) Introduction to public finance and the financial concepts and rules of thumb necessary for understanding the financial issues faced by federal, state, and local governments and other public agencies. Prerequisite: COMM 1103.
Course Descriptions

WCOB3023 Production and Delivery of Goods and Services (Sp, Su, Fa) This course is designed to provide students with a broad understanding of the production and delivery of goods/services. The course focuses on concepts and methods for managing the flow of material and information throughout the production and delivery of goods/services. Prerequisites: WCOB 1023, ECON 2033, and WCOB 1012–each with a grade of "C" or better.

WCOB2033 Acquiring and Managing Human Capital (Sp, Su, Fa) Study of the process of acquiring and managing human resources, focusing on the organizational behavior, legal, economic, and technical issues concerned with business decisions about acquiring, motivating, and retaining employees; emphasis given to the development, implementation, and assessment of policies and practices consistent with legal, social, human, and environmental dynamics. Prerequisite: WCOB 1023, WCOB 1033, ECON 2023, and WCOB 1012–each with a grade of "C" or better.

WCOB2033H Honors Acquiring and Managing Human Capital (Irregular) Study of the process of acquiring and managing human resources, focusing on the organizational behavior, legal, economic, and technical issues concerned with business decisions about acquiring, motivating, and retaining employees; emphasis given to the development, implementation, and assessment of policies and practices consistent with legal, social, human, and environmental dynamics. Prerequisite: WCOB 1023, WCOB 1033, ECON 2023, and WCOB 1012–each with a grade of "C" or better.

WCOB2043 Acquiring and Managing Financial Resources (Sp, Su, Fa) Key decisions within business processes related to the acquisition and management of capital resources, including decisions regarding what to acquire, how to finance the acquisition, and issues related to the accounting for those capital resources. The identification of key decisions leads to a critical discussion of information and financial analysis. Prerequisite: WCOB 1023, WCOB 1033, ECON 2023, and WCOB 1012–each with a grade of "C" or better.

WCOB210V Special Topics in Business (Sp) (3-6) Special topics of current importance. May be repeated for up to 6 hours of degree credit.

WCOB3003H Honors College Colloquium (Sp, Fa) An inter-disciplinary course exploring events, concepts, and/or new developments in the field of business administration. Prerequisite: Junior or senior standing. May be repeated for up to 6 hours of degree credit.

WCOB300V Study abroad (Sp, Su, Fa) (1-15) Open to under-graduates and graduate students to study abroad in officially sanctioned programs. May be repeated for up to 24 hours of degree credit.

WCOB316 Business Strategy and Planning (Sp, Fa) Integrative study of the managerial decisions; introduces students to an understanding of strategic competitiveness and development in which business strategy is formulated and implemented; uses a combination of theoretical and experiential approaches to designing business plans for key decisions, implementing these decisions, and monitoring their effects. Prerequisite: A business student must complete the pre-business requirements before enrolling for this course. WCOB 2013, WCOB 2023, WCOB 2033, and WCOB 2043 must each be completed with a grade of "C" or better. This course is restricted to Walton College students.

WCOB316H Honors Business Strategy and Planning (Fa) Integrative study of the managerial decisions; introduces students to an understanding of strategic competitiveness and the way in which business strategy is formulated and implemented; uses a combination of theoretical and experiential approaches to designing business plans for key decisions, implementing these decisions, and monitoring their effects. Prerequisite: A business student must complete the pre-business requirements before enrolling for this course. WCOB 2013, WCOB 2023, WCOB 2033, and WCOB 2043 must each be completed with a grade of "C" or better. This course is restricted to Walton College students.

WCOB3023 Sustainability in Business (Irregular) The course focuses on theoretical and practical bases for pursuing sustainability in business and society. Students learn the limits of sustainability, the definitions of sustainability, measured on four axes expressed as: 1987 UN Brundtland Report (intergenerational equity), Triple-play (people, planet, profits), resource sustainability, and economic justice (fair global system of rules, fairly enforced). Prerequisite: Junior standing.

WCOB3033 Third World Experience in Business (Irregular) This course is designed to provide the student with a comprehensive and critical analysis of the history of the African American experience as a member of the business sector in the United States economy. The course will review information that includes and demonstrates activities prior to slavery, during, and after slavery.

WCOB3043 From Books to Boardrooms (Sp, Su, Fa) Examines career choices and skills necessary to be successful as a professional in the workforce. Self-assessment and career exploration strategies are examined using career development theories. Incorporates career path management principles through individualized career planning, job searching, workplace success skills, and college to work transition. Business majors may not use course towards upper level business credit, but may be used toward non-business elective credit. Prerequisite: Junior standing.

WCOB310V Cooperative Education (Sp, Su, Fa) (1-3) Co-op allows students to earn one or two hours of credit per semester for work related to their major. Accumulated credit may not exceed six hours. Eligibility requires: 1) junior standing in the college, 2) completion of the pre-business core and 3) the prescribed GPA. See catalog for details. Prerequisite: Junior standing in one of the pre-business core courses. May be repeated for up to 6 hours of degree credit.

WCOB410V Special Topics in Business (Irregular) (1-6) Special business topics of an interdisciplinary nature. May be repeated for up to 6 hours of degree credit.

WCOB410VH Honors Special Topics in Business (Irregular) (1-6) Special business topics of an interdisciplinary nature. May be repeated for up to 6 hours of degree credit.

WCOB4213 ERP Fundamentals (Sp, Fa) An introduction to enterprise resource planning systems. Students should gain an understanding of the scope of these integrated systems that reach across organizational boundaries and can change how a company does business. Implementation issues are covered, including the importance of change management. Prerequisite: WCOB 2023 and WCOB 2043 or CSCE 1414 each with a grade of "C" or better.

WCOB410VH Honors Special Topics in Business (Irregular) (1-6) Special business topics of an interdisciplinary nature. May be repeated for up to 6 hours of degree credit.

WCOB4993H Honors Thesis (Sp, Fa) Provides students with an understanding of the scope of these integrated systems that reach across organizational boundaries and can change how a company does business. Implementation issues are covered, including the importance of change management. May be repeated for up to 6 hours of degree credit. Prerequisite: Graduate standing.

WCOB5023 Sustainability in Business (Sp, Fa) May be repeated for up to 12 hours of degree credit. Prerequisite: Junior standing.

WCOB510V Special Topics in Business (Irregular) (1-3) The prescribed GPA. See catalog for details. Prerequisite: Junior standing in one of the pre-business core courses. May be repeated for up to 6 hours of degree credit.

WCOB510VH Honors Special Topics in Business (Irregular) (1-3) Special business topics of an interdisciplinary nature. May be repeated for up to 6 hours of degree credit.

WCOB5843 Cross-Sector Collaboration for Sustainability (Sp) Focuses on the dynamics of business, cultural communities, social movements, and organizations, working together toward people, planet, profits, and economic justice (fair global system of rules, fairly enforced). This course explores how organizations in the three sectors of society work together in value creation by addressing social, environmental, and economic challenges. Includes the dynamics of organizational, the genesis of organizational theory and evolution of organizational dynamics, including examination of system structure, chaos theory, group dynamics and interactions, and issues impacting organizations, and techniques of change agent intervention.

WDE6533 Introduction to Distance Learning (Sp) This course is designed to provide information on the role of the school in workforce development and to introduce a teacher to the skills and knowledge needed for the development of educational environments, especially online learning. This course emphasizes learning and teaching environments, especially online learning. This course emphasizes learning and teaching environments, especially online learning.

WDED5011 Foundations of Adult Education (Sp) History of the adult education movement in America, characteristics, interests, abilities, and educational needs of adults; the role of the adult education movement in society; methods and techniques of conducting adult classes.

WDED5223 Principles of ABE/GED/ESL (Su) An introductory course teaching adults at the Adult Basic Education (ABE), General Education Development (GED-High School Equivalency), and English as a Second Language (ESL) levels. Will address instructional needs assessment, curriculum development and evaluation, and techniques of teaching basic skills in various settings including traditional, technical schools, community colleges, and corporate organizations.

WDED5233 Teaching Disadvantaged Adults (Su) A survey of the characteristics of adult learners and the teaching strategies described as educationally disadvantaged. Consideration given to the various physical, mental, social, and economic factors which contribute to the uniqueness of this body of individual differing abilities.

WDED5433 School-to-Workforce (Su) This course is designed to provide information on the role of the school in workforce development and to introduce a teacher to the skills and knowledge needed for the development of educational environments, especially online learning. This course emphasizes learning and teaching environments, especially online learning.

WDED5563 Introduction to Distance Learning (Sp) This course is designed to build a knowledge base about distance learning environments, especially online learning. This course emphasizes interaction among pedagogical models, instructional models, and learning technologies. The content is contextualized within higher learning, k-12 school, and corporate environments.

WDED5583 Internship (Sp, Su, Fa) Site-based activity designed for those seeking Adult Education Licensure. Pre-requisite: WDED 5513. Prerequisite: WDED 5223. Internship (Pr) Nontraditional Student (Irregular) An introduction of activities that could ultimately promote greater access and success for adult learners with higher education and/or advanced training.

WDED6123 Adult Learner: The Later Years (Sp, Su, Fa) Directed toward people who are most likely to interact with older adults in a learner setting. Emphasis is on understanding the educational needs, wants, and characteristics of older learners. May be repeated for up to 12 hours of credit.

WDED6213 Training in the Workplace (Su) An introduction to and survey of current theories and practices in training in the workplace. Students are expected to explore selected interdisciplinary topics in areas such as adult education, vocational education, human resource development, organizational behavior, instructional technology, and economics as they relate to human development. May be repeated for up to 12 hours of credit.

WDED6223 Organization Development (Sp) This course teaches development of organization activities that intervene in the interaction of people systems to increase the effectiveness of people, systems, and organizations of a variety of settings including for-profit and nonprofit organizations. We investigate the forces that bring about and influence these collaborations from practical and theoretical perspectives, and how these collaborations relate to the fields of business administration.

WDED6311 Seminar in Business Administration Teaching (Su) This course in college level teaching is designed for graduate students and new college teachers with specific emphasis on the Business Administration bestselling teaching and learning environment as teachers. Prerequisite: Classroom standing.

WDED6611 Seminar in Business Administration Teaching (Irregular) This seminar in college level teaching is designed for graduate students and new college teachers with specific emphasis on the Business Administration teaching and learning environment as teachers. Prerequisite: Graduate standing.
especially the processes that facilitate individual and group learning.

WDED6513 Leadership Models and Concepts (Sp, Su) This doctoral course concentrates on using commonly accepted principles of leadership to develop skills needed in workforce development education settings.

WDED6523 Curriculum Design (Sp, Su, Fa) Determining principles of curriculum development, implementation, and evaluation with emphasis in adult and human resource development education.

WLIT1123H Adult Literacy (Su) This course is based upon theoretical models of adult learning and teaching methods. The course addresses the historical background of literacy programs, evolution of teaching techniques, social economic and cultural concerns, and adult learning development, evaluation, and techniques of teaching adult literacy in various settings, including public schools, vocational and technical schools, technical institutes, technical colleges, community organizations, and the workplace.

WDED6543 Program Planning and Evaluation in Workforce Development (Sp) Emphasis is given to understanding the theoretical foundation upon which the programming and evaluation processes are predicated, developing a theoretical mode, and acquiring the conceptual tools necessary for analyzing the programming process in any workforce development education organization.

World Literature (WLIT)

WLIT1113 World Literature I (Sp, Su, Fa) An introduction to literature from the beginning of civilization to about 1650.

WLIT1113H Honors World Literature I (Sp, Su, Fa) Introduction to the great diversity of Europe. Through three five-week units, students will participate in discussions regarding the identity of the inhabitants of France, Germany, and Italy. The course is team taught by faculty in French, German, and Italian. Does not count toward the foreign language requirement.

WLIT1123 World Literature II (Sp, Su, Fa) An introduction to literature from 1650 to the present. Prerequisite: WLIT 1113.

WLIT1123H Honors World Literature II (Sp, Su, Fa) A continuation of the study of literary masterpieces of the world. Prerequisite: WLIT 1113H and participation in the Fulbright College Scholars Program or English ACT score of 28 or above.

WLIT2323 Greek and Roman Mythology (Irregular) A study of the stories, figures, and motifs in the mythology of Greece and Rome. Prerequisite: ENGL 1013 and ENGL 1023.

WLIT2633 The Bible as Literature (Irregular) The several translations of the Bible; its qualities as great literature; its influence upon literature in English; types of literary forms. (Same as ENGL 3623).

WLIT2723 Classical Arabic Literature (Irregular) Arabic literature from the 1) pre-Islamic era; 2) dawn of Islam, 610-661 C.E.; 3) Umayyad era, 661-750; Abbasid era, peaking in the ninth and tenth centuries. May include selected post-classical but pre-modern works. No Arabic required; students with Arabic encouraged to engage original text.

WLIT2723H Classical Arabic Literature (Irregular) Arabic literature from the 1) pre-Islamic era; 2) dawn of Islam, 610-661 C.E.; 3) Umayyad era, 661-750; Abbasid era, peaking in the ninth and tenth centuries. May include selected post-classical but pre-modern works. No Arabic required; students with Arabic encouraged to engage original text.

WLIT3723 Arab American Literature (Odd years, Sp) Literature by Arab immigrants to North America and their descendants, probing pertinent contexts including the rise of ethnic studies in the U.S. No Arabic required.

WLIT3733H Honors Arab American Literature (Odd years, Sp) Literature by Arab immigrants to North America and their descendants, probing pertinent contexts including the rise of ethnic studies in the U.S. No Arabic required.

WLIT3983 Special Studies in Comparative Literature (Irregular) (1-6) Independent study of a special topic in world literatures and cultures. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

WLIT7603 Psychoanalysis and Culture (Irregular) Readings of key texts in Psychoanalytic thought and cultural criticism including Freud, Lacan, Kristeva, Certeau, Zizek, and others. Selections of Psychoanalytic approaches to literature, film and gender and trauma studies.

WLIT7603H Honors World Literature II (Irregular) (1-6) Independent study of a special topic in world literatures and cultures. Prerequisite: Graduate standing. May be repeated for up to 6 hours of degree credit.

WLIT7703 Doctoral Dissertation (Sp, Su, Fa) (1-18) This course provides senior level undergraduates and graduate students with innovative ways to teach and communicate through the use of Web 2.0 technologies as applied to second languages. Topics of discussion include instructional systems design, video editing and development for internet and DVD delivery, and effective utilization of video in teaching and communication. Prerequisite: Senior standing.

WLIT7803H Honors Teaching Foreign Languages on the College Level (Irregular) Focus on basic methodological concepts and their practical application to college foreign language instruction.

WLIT7813 Descriptive Linguistics (Fa) A scientific study of language with primary emphasis on modern linguistic theory and analysis. Topics include phonology, morphology, syntax, semantics, language acquisition, and historical development of world languages. (Same as ANTH 5473, COMM 5463, ENGL 5463).

WLIT785V Special Investigations (Irregular) (1-6) May be repeated for up to 6 hours of degree credit.

WLIT796V Seminar (Irregular) (1-6) May be repeated for up to 6 hours of degree credit.

WLIT8243 Psychoanalysis and Culture: Rebellion (Irregular) Readings of key texts in Psychoanalytic thought and cultural criticism including Freud, Lacan, Kristeva, Certeau, Zizek, and others. Selections of Psychoanalytic approaches to literature, film and gender and trauma studies.

WLIT8243H Honors Psychoanalysis and Culture (Irregular) Readings of key texts in Psychoanalytic thought and cultural criticism including Freud, Lacan, Kristeva, Certeau, Zizek, and others. Selections of Psychoanalytic approaches to literature, film and gender and trauma studies.

WLIT8243H Honors Psychoanalysis and Culture: Rebellion (Irregular) Readings of key texts in Psychoanalytic thought and cultural criticism including Freud, Lacan, Kristeva, Certeau, Zizek, and others. Selections of Psychoanalytic approaches to literature, film and gender and trauma studies.

WLIT8243H Honors Psychology and Culture: Rebellion (Irregular) Readings of key texts in Psychoanalytic thought and cultural criticism including Freud, Lacan, Kristeva, Certeau, Zizek, and others. Selections of Psychoanalytic approaches to literature, film and gender and trauma studies.

WLIT8243H Honors Psychology and Culture: Rebellion (Irregular) Readings of key texts in Psychoanalytic thought and cultural criticism including Freud, Lacan, Kristeva, Certeau, Zizek, and others. Selections of Psychoanalytic approaches to literature, film and gender and trauma studies.

WLLC2413 Migrant Experiences in Multicultural Europe (Irregular) Introduction to the great diversity of Europe. Through three five-week units, students will participate in discussions regarding the identity of the inhabitants of France, Germany, and Italy. The course is team taught by faculty in French, German, and Italian. Does not count toward the foreign language requirement.

WLLC3173 Introduction to Linguistics (Irregular) Introduction to language study with stress upon modern linguistic theory and analysis. Data drawn from various languages reveal linguistic universals as well as phonological, syntactic, and semantic systems of individual languages. Related topics: language history, dialectology, language and its relation to culture and society, the history of linguistic scholarship. Prerequisite: Junior standing. (Same as ANTH 3173; COMM 3173; ENGL 3173).
A

Abbreviations, course, 307
Academic advising, 25
Academic bankruptcy, 18
Academic calendar, 4, 5
Academic facilities and resources, 50
Academic Honors Societies, 13; also see colleges
Academic integrity, 34
Academic, satisfactory progress, 39
Academic scholarship office, 20
Academic regulations, 34, also see colleges
academic status, 39
additional Bachelor’s degree, 44
advanced standing programs, 45
attendance, 37
core requirements, 39-41
dismissal, 39
eight-semester degree completion plan, 42
final examination policy, 37
grade forgiveness, 38
grades and marks, 38
graduation honors, 38
graduation rates, 43
graduation requirements, 39
honors roll, 38
integrity, 34
photographic and video images, 44
privacy (FERPA), 44
progress, suspension, dismissal, 39
religious observances, 37
requirements for graduation, 39
senior scholar, 38
student academic appeals, 45
suspension, 39
term paper assistance, 37
transfer of credit, 43
University Core, (State Minimum Core), 39-41
waiver of academic policies, 44
Accelerated admission, 16
Accounting, 214, 308
Accreditations, 12
Adding and dropping courses, 26

Additional bachelor’s degree, 44
Administrative officers, 7
Admission, 15
academic bankruptcy, 18
English language use, 19
graduate school, 19
how to apply, 16, 17
international students, 18
law school, 19
non-degree seeking students, 17
preparatory curriculum for freshmen, 16
returning students, 17
transfer admission, 16
when to apply, 16, 17
Advanced standing programs, 43
Advanced Placement, 46-47
CLEP credit, 45
credit by examination, 45
International Baccalaureate (IB), 46
placement and proficiency tests, 18
Advising, academic, 25
Aerospace Studies, 282, 310
African and African American Studies, 135, 308
Agricultural and Extension Education, 78, 311
Agricultural Communications, 78
Agricultural Education, 78, 311
Agricultural Systems Technology Management, 78
Agricultural Economics and Agribusiness, 81, 310
Agricultural Business, 81
Global Agricultural, Food and Life Sciences, 82
Agricultural Experiment Station, 51
Agricultural, Food & Life Sciences, Dale Bumpers College of, 73
accreditations, 75
academic advising, 74
academic requirements, 77
admission requirements, 77
degree requirements, 77
degrees offered, 75
facilities, 73
fields of study, 75
grading system, 78
history, 73
honors societies, 74
honors program, 76
majors and minors, 75
organizations, 74
pre-veterinary medicine, 76
scholarships, 74
study abroad, 77
Agricultural Mechanization, courses, 312
Agricultural Statistics, courses, 313
Air Force Reserve Officer Training Corps (ROTC), 14, 282, 310
scholarships, 24
Alumni scholarships, 24
American Studies, 135, 313
Animal Science, 83, 313
Anthropology, 137, 314
AP exam, 46
Apparel Studies, 97
Application fee, 15
Application for,
  financial aid, 20
  graduation, 40
  Graduate School, 19
  School of Law, 19
  undergraduate admission, 15
Applied Sustainability Center, 51
Arabic, courses, 311
Architecture, Fay Jones School of, 106
  academic regulations, 110
  accreditation, 114
  admission, 107
  Architecture, department of, 115, 316
  Community Design Center, (UACDC), 62, 107
  degrees offered, 107
  Design Studio, 106
  digital design and fabrication, 106
  Garvan Woodland Gardens, 57, 107
  honors, 112
  Interior Design, department of, 119, 367
  Landscape Architecture, department of, 120, 373
  library resources, 106
  materials shop, 106
  minors, 107
  organizations, 109
  scholarships, 109
Arkansas Archeological Survey, 51
Arkansas Biotechnology Center, 52
Arkansas Center for Space and Planetary Sciences, 52
Arkansas Cooperative Fish and Wildlife Research Unit, 52
Arkansas High Performance Computing Center, 52
Arkansas Household Research Panel, 52
Arkansas Leadership Academy, 52
Arkansas Union, 65
Arkansas Water Resources Center, 52
Army Reserve Officer Training Corps (ROTC), 14, 282, 383
scholarships, 24
Art Education, courses, 317
Art History, courses, 317
Art, 139, 318
Arts and Sciences, 123, 144, 318
Arts and Sciences, Fulbright College of, 123
  academic regulations, 130
  accreditations, 134
admission, 129
combined academic and medical or dental degree, 131
degree requirements, 130
degrees offered, 124
facilities, 123
fields of study, 124
health-related professions, 128
honors studies, 131
majors, 124
minors, 124
pre-professional programs, 124
scholarships, 130
student organizations, 130
teacher education programs, 125
Asian Studies, 142, 313
Associated Student Government, 67, see Code of Student Life
Astronomy, courses, 319
Athletic Training, courses, 320
Attendance, 37
Auditing courses, 26

B
Bachelor of Architecture, 115
Bachelor of Arts, 132
Bachelor of Fine Arts, 134
Bachelor of Interior Design, 119
Bachelor of Landscape Architecture, 120
Bachelor of Music, 133
Bachelor of Science, 132
Bachelor of Science in Agricultural, Food and Life Sciences, 75
Bachelor of Science in Biological Engineering, 266
Bachelor of Science in Business Administration, 203
Bachelor of Science in Chemical Engineering, 268
Bachelor of Science in Civil Engineering, 270
Bachelor of Science in Computer Engineering, 271
Bachelor of Science in Education, 236
Bachelor of Science in Electrical Engineering, 274
Bachelor of Science in Human Environmental Sciences, 97
Bachelor of Science in Industrial Engineering, 276
Bachelor of Science in International Business, 210
Bachelor of Science in Mechanical Engineering, 277
Bachelor of Science in Nursing, 249
Banking, see Finance
Bankruptcy, academic, 18
Bessie Boehm Moore Center for Economic Education, 53
Biochemistry, Chemistry and, 147, 328
Biological and Agricultural Engineering, 266, 320
Biological Sciences, 143, 322
Biomedical Engineering, 267, 325
Blair, Diane, Center for the Study of Southern Politics and Society, 57
Board of Trustees, 6
Botany, courses, see Biology
Boyer, Sylvia Hack, Center for Student Services, 235
Bumpers College of Agricultural, Food and Life Sciences, 73
Business minors for nonbusiness students, 145, 213
Business Economics, 216
Business Education, 241
Business Law, courses, 325
University of Arkansas, Fayetteville

Index

Business, Sam M. Walton College of, 203
  academic regulations, 205
  accreditations, 213
  admission, 204
  Business Administration minors for non-business students, 145, 213
  cooperative education, 204
  degree requirements, 207
  degrees offered, 203
  facilities, 203
  fields of study, 207
  graduation requirements, 206
  honors, 207
  majors, 204
  minors, 204
  minors in Fulbright College, 213
  pre-business requirements, 205
  scholarships, 204
  student organizations, 204

C
Calendar, academic, 4, 5
Career and Technical Education, 241, 326
Career Development Center, 64
Cartography, 138, 163
Cell and Molecular Biology, courses, 327
Center for Advanced Computing and Communications, 53
Center for Advanced Spatial Technologies (CAST), 53
Center for Arkansas and Regional Studies, 53
Center for Business and Economic Research, 53
Center for Communication and Media Research, 54
Center for Children and Youth, 54
Center for Engineering Logistics and Distribution, 54
Center for Executive Education, 54
Center for Information Security and Reliability, 54
Center for Innovation in Healthcare Logistics, 55
Center for Community Engagement, 66
Center for Mathematics and Science Education, 55
Center for Protein Structure and Function, 55
Center for Retailing Excellence, 55
Center for Semiconductor Physics in Nanostructures, 55
Center for Social Research, 55
Center for Statistical Research and Consulting, 56
Center for the Utilization of Rehabilitation Resources for Education, Networking, Training and Service, 56
Center of Excellence for Poultry Science, 56
Chancellor, 7
  Chancellor’s message, 8
Change of address, 25
Chemical Engineering, 268, 327
Chemistry and Biochemistry, 147, 328
Childhood Education, 244
Chinese, courses, 330
Civil Engineering, 270, 340
Class attendance, 35
Classical Studies, 150, 335
CLEP credit, 45

Clinton School of Public Service, courses, 406
Code of Student Life, available from the Dean of Students
College of (also see School of),
  Agricultural, Food and Life Sciences, Dale Bumpers, 73
  Arts and Sciences, J. William Fulbright, 123
  Business, Sam M. Walton, 203
  Education and Health Professions, 235
  Engineering, 261
  Honors College, 68
College Level Exam Program (CLEP), 45
College Scholarships, 20
Combined academic and medical or dental degree, 127
Communication, 150, 336
Communication Disorders, 258, 326
Community and Family Institute, 56
Community Design Center, 62, 107
Community Health Promotion, 253, 330
Competency-Based Teacher Development, 244
Computer Science and Computer Engineering, 271, 338
Computing facilities, 48
Contract, student/university, 2
Cooperative Education Program, 14
Core, 39-41
Cost estimates, 28
Counselor Education, courses, 335
Course, descriptions, 307
  load, 27
  numbering, 307
  prefixes, 307
Courses that do not count toward a degree, 26
Credit by examination, 43
  Advanced Placement (AP), 46-47
  CLEP, 45
  International Baccalaureate (IB), 46
  Placement and proficiency tests, 18
Credit, transfer of, 41
Criminal Justice, 198, 335
Crop Management, 85
Crop, Soil, and Environmental Science, 85, 339
Curriculum and Instruction, 240, 331

D
Dale Bumpers College of Agricultural, Food and Life Sciences, 73
Dance, courses, 341
Dance Education/Activity, courses, 341
David and Barbara Pryor Center for Arkansas Oral and Visual History, 57
Deans, 7
Degree Completion Policy, Eight Semester, 42
Degree program requirements, 38, see colleges
Degree requirements
  additional bachelor's degree, 44
  general for baccalaureate degree, 39
  graduation honors, 37, see also colleges and schools
  University Core, 39-41
Degrees offered, See colleges and schools
Developmental Course Placement, Arkansas State Requirements for, 25
Diane Blair Center for the Study of Southern Politics and Society, 54
Disabilities, students with, 64
Dismissal, 39
Drama, 153, 341
Dropping and adding courses, 26

E

Earth Science, 162
Economics,
Agriculture, 81, 310
Arts and Sciences, 155, 344
Business 216, 344
Education and Health Professions, College of, 235
academic regulations, 237
accreditations, 240
admission, 237
degree requirements, 240
degrees offered, 236
facilities, 235
fields of study, 236
honors, 239
majors, 236
minors, 236
scholarships, 237
student organizations, 237
teacher licensure, 236
Education, courses, 346
Education Reform, courses, 346
Educational Foundations, courses, 345
Educational Leadership, courses, 345
Educational Statistics and Research Methods, courses, 352
Educational Technology, courses, 353
Eight Semester Degree Completion Policy, 42
Eleanor Mann School of Nursing, 249, 390
Electrical Engineering, 274, 346
Elementary Education, 248
Engineering, College of, 261
academic regulations, 264
accreditations, 265
admission, 262
cooperative education, 259
degree requirements, 264
degrees offered, 262
facilities and laboratory fees, 263
fields of study, 262
honors, 262
organizations, 264
scholarships, 263
Engineering Experiment Station, 57
Engineering Research Center, 57
English composition requirement, 40
English language use by non-native speakers, 19
English proficiency for admission, 19
English, 157, 349
English as a second language, courses, 344
Enhanced Learning Center, 48
Enrollment requirement, 38
Enrollment services, 15
Entomology, 89, 352
Environmental Dynamics, courses, 349
Environmental science, courses, 351
Environmental Sciences, School of Human, 97
Environmental, Soil, and Water Science, 87
Equine science, 85
Ethnomusicology, courses, 374
European Studies, 159, 353
Extension Education, courses, 353

F

Faculty, All University, 284
Family and Community Institute, 56
Family and Consumer Sciences Education, 242
Family Educational Rights and Privacy Act (FERPA), 42
Fay Jones School of Architecture, see “Architecture, Fay Jones School of”
Fees, 28
Fields of study, 10
Final examination policy, 37
Finance, 219, 354
Financial Aid and Scholarships, 20
application procedure, 20
college and departmental scholarships, 23
determining need, 20
satisfactory academic progress, 20
scholarships for new students, 21
special scholarships and conditions, 24
Fine Arts requirement, 40
First-ranked senior scholars, 39
Food Safety Manager certificate of proficiency, 96
Food Science, 89, 353
Food, Human Nutrition & Hospitality, 98
Dietetics, 98
General Foods and Nutrition, 99
Hospitality and Restaurant Management, 100
Foreign Languages, see World Languages, Literatures, and Cultures,
and individual language names
French, 199, 355
Freshman,
admission requirements, 16
orientation, 25
Fulbright College, 123
Fulbright Institute of International Relations, 57, 161
Full-time student course load, 27

G

Garrison Financial Institute, 57
Garvan Woodland Gardens, 57, 107
Gender Studies, 161
General Business, see Management
General Engineering, courses, 358
General Human and Environmental Sciences, 102, 359
Genesis Technology Incubator, 58
Geographical Information Systems (GIS), 138, 163
Geography, 162, 355
Geology, 163, 356
Geosciences, 161, 357
German, 200, 357
Gerontology, courses, 358
Glossary, 305
Grade forgiveness, 38
Grade-point calculations, 38
Grades and Marks, 38
Grading system, agriculture, 78
Grading system, architecture, 110
Graduate and professional study, 13
Graduate School admission, 19
Graduate standing, 19
Graduate studies, 13, also see Graduate School Catalog
Graduation Honors, 38, see colleges
Graduation rates, 43
Graduation requirements, 39
Greek life, 66
Greek, courses, 359

H
Handbook, see Code of Student Life
Handicapped, see disabilities
Hazard Analysis and Critical Control Point Coordinator certificate of proficiency, 96
Health Center, 65
Health, Human Performance and Recreation, 252, 361
Health Professions, College of Education and, 235
Health-related professions, 128
High Density Electronics Center, 58
High school preparation, 16
Higher Education, courses, 362
Historic Preservation minor, 163
History and civil government requirement, 40
History of the University, 9
History, 163, 362
Honor roll, 37
Honor societies, campuswide academic, 13
Honor societies, campuswide leadership, 13
Honorary Organizations, 13, see colleges
Honors College, 68
Academic Regulations, 69
admission to Honors College, 69
Advanced Placement Summer Institute, 68
grants, 68
scholarships, 69
Honors Studies, 12, see colleges
Horticulture, 92, 365
Hospitality, see Food, Human Nutrition and Hospitality
Hours allowed per semester, 27
Housing and dining, 65
Human Development and Family Sciences, 103
Child Development, 103
Birth through Kindergarten, 103
Lifespan, 103
Human Environmental Sciences, 102, 359
Human Environmental Sciences, School of, 97
Human Performance Laboratory, 58
Human Resource Development, 259, 366
Human Resource Management, see Management
Humanities, 167, 367

Identification cards, 25
Industrial Engineering, 276, 368
Information Systems, 223, 370
Information Technology Research Center, 58
Information Technology Services, 48
Institute for Nanoscience and Engineering, 58
Institute of Food Science and Engineering, 58
Interdisciplinary minors, 70
Interior Design, 119, 367
International Baccalaureate Program (IB), 46
International Center for the Study of Early Asian and Middle Eastern Musics, 59
International Economics and Business, 217
International Relations, 166, 370
International Relations, Fulbright Institute of, 55
International students, 18
Italian, courses, 371

J
J. William Fulbright College of Arts and Sciences, 123
Japanese, 202, 371
Jean Tyson Child Development Study Center, 74
Joint J.D./M.B.A. and M.P.A. programs, 280
Journalism, 170, 371
Junior college credit transfer, 43
Juris Doctor degree, see School of Law Catalog

K
Kinesiology, 254, 373
King Fahd Center for Middle East Studies, 59

L
Landscape Architecture, 120, 373
admission, 107
Landscape Horticulture minor, 94
Language requirement for admission, 19
Latin American and Latino Studies, 174, 375
Latin, courses, 375
Law, School of, 279
3/3 Programs, 281
accreditations, 281
admission, 19, 280
courses, 375
degree requirements, 281
facilities, 279
graduate studies, 281
Joint J.D./M.B.A. programs, 280
Joint J.D./M.P.A. programs, 280
Joint J.D./M.A. program, 280
Library, 280
LSAT, 281
pre-law studies, 281
scholarships, 281
transfer students, 281
Libraries, 49
LSAT, law exam, 281

M

Mack-Blackwell National, Rural, Transportation Study Center, 59
Majors, list of, 10
Management, 225, 383
Mann, Eleanor, School of Nursing, 249, 390
Marketing, 229, 384
Master of Business Administration, courses, 380
Mathematical Sciences, 175, 378
Mathematics core requirement, 40
Maximum course load, 27
Mechanical Engineering, 277, 380
Medical Sciences and Dentistry, 131
Medical, Pre-, 11, 128
Medieval and Renaissance Studies, 179
Message from the Chancellor, 8
Microbiology, see Biological Sciences
Microelectronics-Photonics minor, 70, 382
Middle East Studies, 179, 382
Military benefits, 24
Military personnel and dependents, tuition, 29
Military Science, 282, 383
Military Transfer Credit, 44
Minimum credit hours, 40
Minimum grade-point average, 40
Minors, 11, see colleges
Mission of University, 9
Moore, Bessie Boehm, Center for Economic Education, 53
Multicultural Center, 49
Music, 180, 384-390

N

National Agricultural Law Center, 59
National Center for Reliable Electric Power Transmission, 60
National Office of Research on Measurement and Evaluation Systems, 60
National testing programs, 49
Native Americans, Resident Status of, 33
New student orientation, 25
Non-degree seeking students, 17
Non-resident,
    definition of, 32
    tuition award, 22
    tuition fee, 28
Non-traditional students, 61
Nursing, Eleanor Mann School of, 249, 390
    admission, 250
    degree requirements, 251
    exit policies, 251
    progression policy, 251
    readmission, 251
Oak Ridge Associated Universities, 60
Off-campus housing, 65
Off-Campus Connections, 63
Office for Education Policy, 60
Office for Studies on Aging, 61
Office of Academic Integrity and Student Conduct, 64
Ombuds Office, 64
On-campus housing, 65
Operations Management, courses, 392
Orientation and Registration, 25
    academic advising, 25
    adding and dropping courses, 26
    audit registration, 26
    course loads, 27
    courses that DO NOT count toward a degree, 26
    developmental course placement, 25
    identification cards, 25
    number of hours allowed per semester, 27
    pass-fail registration, 26
    proper address of students, 25
    registration periods, 25
    student standing, 27
    undeclared major, 26
    withdrawal from registration, 26
Out-of-state student fees, 22, 28, 32

P

Parking Permit, fees, other, 32
Pass-fail grades, 26
Pat Walker Health Center, 65
Pest Management, 95
Philosophy, 185, 394
Photographic and video images of students, 45
Physical Education/Activity, courses, 393
Physics, 186, 394
Placement test, 18
Plant Pathology, 94, 396
Plant Science, courses, 400
Political Science, 191, 396
Poultry Science, 95, 398
Preparatory curriculum, 16
Pre-professional medical programs, 124, see colleges
President, System, 7
Pre-veterinary program, 76
Privacy, right of, 44
Profile, University, 9
Programs abroad, 14, see colleges
Psychology, 192, 399
Public Administration, courses, 392
Public Policy, courses, 400

Q
Qualitative requirements, academic progress, 20
Quality Writing Center, 49
Quantitative requirements, academic progress, 20

R
Radio-Frequency Identification Research Center, 61
Readmission, 17
Recreation and Sports Management, 257, 400
Refund adjustments, 31
Registration, 25
academic advising, 25
adding and dropping courses, 26
audit registration, 26
course loads, 27
courses that DO NOT count toward a degree, 26
developmental course placement, 25
identification cards, 25
number of hours allowed per semester, 27
pass-fail registration, 26
proper address of students, 25
registration periods, 25
student standing, 27
undeclared major, 26
withdrawal from, 26
Rehabilitation, Human Resources & Communication Disorders, 258
Communication Disorders, 258, 326
Human Resource Development, 259, 366
Religious observances, 37
Religious Studies, 194
Remedial course placement requirements, 26
Remote Sensing, 138, 163
Requirements for graduation, 39
Research Units, 51
Reserve Officer Training Corps (ROTC), 13, 282
Residence status, 32
Restaurant Management, see Food, Human Nutrition and Hospitality
Retail major, 231
Returning students, 17
Room and board, costs, 30
ROTC, 13, 282
Rural Sociology, courses, 402
Russian, courses, 402
Regulations, academic, 34

S
Sam M. Walton College of Business, 203
Scholarships and Financial Aid, 20, also see colleges
School of (also see College of),
Architecture, 106
Human Environmental Sciences, 97
Law, 279
Nursing, 249
Social Work, 194
Second majors, 10
Senior citizens, tuition exemption, 30
Senior scholar, 37
Services for students with disabilities, 64
Small Business and Technology Development Center, 61
Social Science requirement, 40
Social Work, 194, 402
Sociology and Criminal Justice, 197, 335, 403
Southwest Radiation Calibration Center, 61
Spanish, 201, 404
Special fees, 30
Special Programs and Opportunities, 13
Speech (see Communication)
Speech and Hearing Clinic, 61
Speech Pathology/Audiology, see Communication Disorders
Sport Management, Recreation and, 257, 400
State Minimum Core, 39-41
Statistics, 178, 405
Student Affairs, 63
Arkansas Union, 65
Associated Student Government, 67
Career Development Center, 64
Center for Community Engagement, 66
disabilities, students with, 64
Greek Life, 66
Health Center, 65
housing, 65
medical services, 65
non-traditional students, 63
Off Campus Connection, 63
Office of Academic Integrity and Student Conduct, 64
Ombuds Office, 64
student media, 67
student organizations, 67
Union, 65
University Housing, 65
University Programs, 67
Veterans Resource and Information Center, 66
Volunteer Action Center, 66
Student, affairs, 63
course load, 27
disabilities, with, 64
Handbook, see Code of Student Life, available from the Dean of Students
insurance, see Health Center, 65
international, 18
media, 67
non-traditional, 63
organizations, 67, also see colleges
records policy (FERPA), 44
residence status, 32
rights, 44
special non-degree seeking, 17

University of Arkansas, Fayetteville
standing, 27
status, 39
support services, 49
transfer, 16, 43, also see colleges
union, 65
Student Support Services, 48
Study abroad, 14, see colleges
Supply Chain Management, 232
Supply Chain Management Research Center, 61
Sustainability minor, 71, 406
Swahili, courses, 406
System Administration, 7

T
Talent Search Programs, 49
Teacher certification, 236
Technology Education, 243, 406
Telephone numbers, see inside front cover
Term paper assistance, 37
Terrorism Research Center, 62
Testing programs,
  AP, Advanced Placement, 46-47
  CLEP, 45
  IB, International Baccalaureate, 46
  LSAT, law, 281
  placement and proficiency tests, 18
Testing Services, 49
Three/Three (3/3) programs, 281
Transcript fee, 30
Transfer of college credits, 43, see colleges
Transfer of military credit, 44
Transfer students, 16, see colleges
Trustees, 6
Tuition and fee exemptions
  Armed Forces personnel, 29
  Native Americans, 33
  senior citizens, 30
  veterans and dependents, 33
Tuition and fees, 28
  adjustments, 29
  residence status for, 32
Turf Management, minor, 94
Tyson Center for Faith and Spirituality in the Workplace, 62

U
U.S. Air Force, ROTC, 282
U.S. Army, ROTC, 282
Undeclared major, 11, 26, also see colleges
Undergraduate Fields of Studies, 10
Union, Arkansas, 65
University of Arkansas Community Design Center, 62, 107
University,
  Career Development Center, 64
  Centers, 51
  contract, student/university, 2
  core requirements, 39-41
  faculty, 284
  Health Center, 65
  history, 9
  housing, 65
  Information Technology Services, 48
  libraries, 49
  location, 9
  major fields of study, 10
  profile, 9
  research units, 51
  Vision statement, 9
Upward Bound Academy for Mathematics and Sciences, 50
Upward Bound for Veterans, 50

V
Veterans benefits, 24
Veterans Resource and Information Center, 64
Veterans Upward Bound, 50
Veterinary, Pre-Medicine, 76
Vice Chancellors, 7
Video images, 44
Vision Statement, 9
Vocational and Adult Education courses, 406

W-Z
Waiver of academic policies, 45
Waiver of non-resident tuition,
  members of Armed Forces, 29
  Native Americans, 33
  Senior citizens, 30
Walton College of Business, courses, 234, 406
Walton, Sam M., College of Business, 203
Welcome, 1
Wildlife Habitat minor, 88
Withdrawal
  from registration, 26
  refund adjustments, 31
Workforce Development, courses, 407
World Languages, Literatures, and Cultures, 200, 408, see also individual
  names of languages
World Literature, courses, 408
Writing Center, 49
Zoology courses; see Biology
The following additions and corrections were made to the PDF version and online version of the Catalog of Studies after a print version was created.

Page 32 — The cost of parking permits and registration fees was updated in the fourth paragraph of Page 32 after the print edition was published. The new text is “There is a parking permit and registration fee ranging from $54.78 to $719.76 for each vehicle, depending upon the parking option selected.”

Page 41 — The course titled COMM 1023 Communication in a Diverse World was added to the list of social science courses that may be taken to fulfill requirements of the university core.

Page 43 — The numbers on the six-year graduation rates of athletes were updated to reflect the 2005 cohort.

Page 64 — The office of Student Ombuds Services was eliminated from the Division of Student Affairs after the catalog went to press. Its description was removed from the PDF version of the catalog.

Page 262 — The Bachelor of Arts in Computer Science (B.A.) was added to the list of degree programs offered by the College of Engineering. The program had been offered by the J. William Fulbright College of Arts and Sciences in previous years but was moved to the College of Engineering in 2012.