The University of Arkansas at Little Rock is a public university in every sense of the word. We exist to serve you, the people of Arkansas, our country, and the world.

UALR provides a high-quality education to a wonderful and very diverse group of students. We offer a broad range of academic programs including a comprehensive set of undergraduate majors, master’s degrees, a law degree, and doctorates. Our alumni are leaders in Arkansas government, law, education, technology, social services, business, health care, and the arts. Indeed, UALR alumni are also serving in the U.S. Congress and in important roles around the world.

The university has been cited in three important economic development studies as critical to Arkansas’s future. UALR plays a large role in enabling the community and the state to compete in the global, increasingly knowledge-based economy. In central Arkansas, UALR plays a significant role in turning talk of regional cooperation into reality. In Little Rock, UALR is committed to revitalizing the section of the city in which the university is located.

Whether you are considering attending UALR in person or online, I encourage you to explore all the University has to offer. UALR is on the fast track for the future, and we can help you reach your full potential as we move forward together.

Welcome to the University of Arkansas at Little Rock.

Sincerely,

Joel E. Anderson
Chancellor
ABOUT THE
UNDERGRADUATE CATALOG

The Undergraduate Catalog is an official publication of UALR, revised annually and published in August each year. It provides information about degree programs, course offerings, and academic regulations that affect undergraduate students. There are separate catalogs for UALR’s graduate and law programs.

The online version of the catalog will be updated when substantive mistakes are identified or course changes are approved so that students have the most current information available.

Please note: The printed version, which is the same as the Adobe PDF available online, is used to determine graduation requirements. You may download the Adobe PDF version of the entire 2012-2013 Undergraduate Catalog at http://ualr.edu/catalog.

Copies of previous catalogs may be found on the catalog archive website and in the Office of Records and Registration.

The catalog is compiled and edited by Kathy Oliverio, Academic Editor, with production assistance provided by Christina Drale, Marita McNair, Daryl Rice, Karen Roberson, Karen Wheeler, and the staff at the UALR Printing Services.

This catalog establishes the graduation requirements set forth by a specific program of study within each college. Typically, students who enter a program within UALR, follow the program of study listed for the academic year the catalog is published. Each college within UALR reserves the right to change graduation requirements for their program. Students should meet regularly with their academic advisors to be certain that they are aware of any changes in graduation requirements that may apply to them.

Admission to UALR in any program of study does not guarantee that the University will continue to offer that program of study indefinitely. UALR reserves the right to change, phase out, or discontinue any program at any time for the best interest of the University.

Right to Change

Any policy, course listing, website, catalog, or class schedule is only intended to announce available courses and applicable policies. If a course appears in this catalog or any other publication, it should not be regarded as a guarantee. Keeping within standards set by other universities with the University of Arkansas System, UALR reserves the right to:

• add or delete courses or programs from its offerings,
• change times, locations, or instructors of courses or programs,
• modify academic calendars without notice,
• cancel any course for insufficient student registrations, or
• revise regulations, charges, fees, schedules, courses, requirements for degrees, and any other policy or regulation affecting students whenever it is considered to be in the best interests of UALR.

The Catalog provides you with background information about the university and programs that are available. You will also find other important information to assist you. The rest of the catalog is arranged by colleges and then departments or divisions within each college. Each of these sections describes the requirements for a major or a minor in that area, as well as all the courses the department offers. Most courses are scheduled at least once every two years. The section titled “Interdisciplinary Studies” describes degrees that involve work in more than one department or college.

The beginning chapters are arranged to help you find what you need as you progress through your journey at UALR.
About the University of Arkansas at Little Rock

The University of Arkansas at Little Rock is accredited by the Higher Learning Commission, North Central Association.

University of Arkansas at Little Rock
2801 South University
Little Rock, Arkansas 72204
Phone: (501) 569-3000
ualr.edu

The Higher Learning Commission
30 North LaSalle Street, Suite 2400
Chicago, Illinois 60602-2504
Phone: (800) 621-7440 / (312) 263-0456
Fax: (312) 263-7462

History

The University of Arkansas at Little Rock was founded in 1927 as Little Rock Junior College under the supervision of the Little Rock Board of Education. The first semester there were eight instructors and about 100 students. By 1929, the college was accredited by the North Central Association of Colleges and Schools, a status it has kept through changes in size and status.

Housed at first in public school buildings, the college moved in 1949 to its present location in southwest Little Rock on a beautifully wooded site donated by Raymond Rebsamen, a Little Rock businessman. By that time, the college was the sole beneficiary of a continuing trust established by former Governor George W. Donaghey.

The institution began a four-year degree program in 1957. At that time, the University was independent and privately supported under a separate board of trustees and took the name Little Rock University.

In September 1969, after several years of discussion and study, Little Rock University merged with the University of Arkansas System to create the University of Arkansas at Little Rock. That was a major step in the creation of a multi-campus system. Within this structure, UALR is state supported, operationally separate, and specifically oriented toward serving the educational needs of Arkansas.

The University of Arkansas merger began a period of rapid growth, which saw UALR go from about 3,500 students and 75 full-time faculty members in 1969 to about 12,000 students and over 500 full-time faculty members today. The University’s expanded offerings now include more than 140 undergraduate and graduate degrees, an extensive schedule of night, weekend, as well as extended programs. We also provide a wide range of community educational services. UALR began offering graduate and professional work in 1975 and the UALR Graduate School was created in 1977. UALR now offers doctoral programs, juris doctorates, graduate and professional programs, as well as joint programs with other campuses of the University of Arkansas System.


Student Body

One of the most exciting things about UALR is the diversity reflected in the student body. The campus includes people ranging from the usual college age of 18-21, to many over 60. Most students work at least part-time, and many are married. Many go to college part-time and take one, two, or three courses a semester. Some students take courses for personal enrichment or job advancement without immediate plans to get a degree. About a third are going to college at night only. More than 60 percent of the students are women, about 29 percent are African-American, and a growing number are international students. The majority of students at UALR are transfer students.


**Mission**

**University of Arkansas System Mission**

The University of Arkansas System is a comprehensive, multi-campus, publicly-aided institution dedicated to the improvement of the mind and spirit through the development and dissemination of knowledge. The University embraces and expands the historic trust inherent in the land-grant philosophy by providing access to academic and professional education, by developing intellectual growth and cultural awareness in its students, and by applying knowledge and research skills to an ever-changing human condition. (Adopted by the University of Arkansas Board of Trustees, 1989)

Most universities today develop and publish statements explaining their purposes and describing their programs. Official boards that govern a campus or coordinate its activities in relation to other campuses also develop and publish such statements. For UALR there are mission statements and role and scope statements developed at three levels: the University of Arkansas System, the statewide coordinating board, and the campus. Although not identical, the statements are similar and consistent in content, each reflecting a different perspective from a different level of responsibility.

The mission statement typically is brief, general, and philosophical. It states why the institution exists. It addresses fundamental purposes and permanent commitments. It distinguishes the university from other societal institutions such as a church, a factory, a political party, or an elementary school.

The role and scope statement is more concrete and specific than the mission statement. Elements of a role and scope statement have only relative permanence. The role and scope statement distinguishes one university from other universities. Each university campus has a role to play in a larger cast of actors. Thus role and scope statements tend to be of particular concern to officials responsible for governing or coordinating multiple university campuses.

The role and scope statement typically discloses the nature and range of the institution’s responsibilities and activities: geographical service area; disciplines in which programs are provided; levels of degree offerings, e.g., associate, baccalaureate, master’s, doctoral; dominant characteristics of the student clientele; other constituencies to be served; emphasis areas; and sometimes future directions.

Included in this chapter are the mission statement of the University of Arkansas System, the role and scope statement for UALR adopted by the University of Arkansas Board of Trustees, and the role and scope statement for UALR published by the Arkansas Department of Higher Education and adopted by the Arkansas Higher Education Coordinating Board. They are followed by the current mission, objectives, and role and scope statements developed at UALR.

**UALR Mission**

The mission of the University of Arkansas at Little Rock is to develop the intellect of students; to discover and disseminate knowledge; to serve and strengthen society by enhancing awareness in scientific, technical, and cultural arenas; and to promote humane sensitivities and understanding of interdependence. Within this broad mission are the responsibilities to use quality instruction to instill in students a lifelong desire to learn; to use knowledge in ways that will contribute to society; and to apply the resources and research skills of the University community to the service of the city, the state, the nation, and the world in ways that will benefit humanity. (Adopted by the UALR Faculty Senate, 1988)

**UALR Objectives**

The University, through its various programs, works toward six mission objectives:

1. **Excellence in Instruction**: The University has a responsibility to provide excellence in instruction to ensure high-quality education for our students. This responsibility includes developing faculty teaching skills, awareness of the ways students learn, assessing student learning outcomes, and enhancement of resources to support effective instruction.

2. **Scholarly Inquiry**: The University has a responsibility to use scholarly inquiry to advance the discovery, preservation, and dissemination of knowledge. This responsibility includes the creation of a university environment that supports diverse research activities by faculty, staff, and students.

3. **Service to Society**: The University has a responsibility to serve society through the application of knowledge and research skills. This responsibility includes applying the University’s resources to local, state, national, and international needs in order to improve the human condition.

4. **Community of Learning**: The University has a responsibility to provide a community of learning through creation of an academic environment that stimulates students, faculty, and staff to become lifelong learners. This environment should heighten the intellectual, cultural, and humane sensitivities of students, faculty, and staff.

5. **Accessibility**: The University has a responsibility to serve the needs of a heterogeneous student population and to make its resources accessible to the general public and to local, state, national, and international groups. This responsibility includes creating opportunities for access to the University’s academic and other resources.

6. **Responsiveness**: The University has a responsibility to remain responsive to a changing environment and society. This responsibility includes a continuous assessment of the University’s strengths and weaknesses in planning for and meeting internal and external needs. It also includes developing the faculty, staff, and students’ desire and capacity in order to create an academic community that is open to change and ready to meet the demands of a dynamic environment and student body.

(Adopted by the UALR Faculty Senate, 1988)
UALR Role and Scope Developed by the University of Arkansas Board of Trustees

The University of Arkansas at Little Rock (UALR) is a Carnegie “Doctoral/Research University” offering a comprehensive range of undergraduate, master’s, and doctoral programs, and a first professional degree in law. Due to its location in the state’s capital city and largest, most complex metropolitan area, the demand for UALR to offer graduate, professional, and doctoral education continues to increase, and, thus, post-baccalaureate offerings will become a larger part of the institution’s instructional program. Because of its metropolitan location, UALR assumes a special role in relation to the needs of urban areas in modern society in its instruction, research, and public service programs. UALR recognizes and accepts that in the 21st Century universities are critical to regional and state economic development.

UALR serves a diverse student body. While it serves traditional students as do most other universities, UALR also serves large numbers of nontraditional students who enroll part-time, commute to campus, have job and family responsibilities, and may be older. The university also enrolls international students from more than 50 countries. Honors courses and a nationally recognized undergraduate scholars program respond to the needs of superior students while students with developmental needs are afforded organized assistance in meeting their educational goals. UALR emphasizes excellence in teaching by all faculty. Developing technological competence in students receives particular attention.

UALR is strongly committed to research and public service. Faculty engage in applied and basic research appropriate to their academic disciplines and in response to economic development needs and other state and regional needs. The university is committed to supporting research and public service, often in cooperative relationships, leading to intellectual property and commercialization. UALR’s public service mission is reflected in numerous outreach activities by individual faculty members, academic units, and a number of specialized units established to provide assistance and expertise to organizations and groups in the community and across the state.

Partnerships are very important to UALR for they enable the university to extend its reach, increase its effectiveness, and leverage its resources. UALR works with other institutions of higher education—particularly the University of Arkansas for Medical Sciences, the University of Arkansas Cooperative Extension Service, the University of Arkansas Clinton School of Public Service, and Pulaski Technical College—to coordinate instructional programs. UALR partners with and complements the research activities of the University of Arkansas for Medical Sciences. UALR gives and receives benefit from partnerships with businesses, schools, governmental offices, neighborhood groups, cultural organizations, and nonprofit organizations. (Adopted by the University of Arkansas Board of Trustees, 1978; revised 1982, 1989, 1991, 2006)

UALR Role and Scope Developed by the Arkansas State Board of Higher Education

Audiences

As the state’s metropolitan university, the University of Arkansas at Little Rock (UALR) has the responsibility for serving:

• Residents of Arkansas and the Little Rock metropolitan area who have completed a high school education and are seeking either a college degree or continuing professional education. As a metropolitan university, the institution serves adult, part-time students in particular.
• Employers across the state, particularly in the region, both public and private, seeking well-educated employees, technical assistance and applied research.
• Economic development interests and entrepreneurs in the region and across the state.
• The research community.
• The community and area by providing a broad range of academic and cultural activities and public events.
• Area K-12 schools seeking college general education courses for advanced students.
• Two-year college transfer students.

Array of Programs and Services

UALR serves these audiences by providing:

• Baccalaureate programs in arts and humanities, the natural sciences, and social sciences appropriate to a teaching institution with a predominantly undergraduate student body.
• Associate, baccalaureate and masters programs in the professional fields of particular importance in the region, including journalism and communications, public administration and community services, computer and information science, nursing, human services (including social work and criminal justice), education, engineering, and business.
• Doctoral programs most needed by regional and state employers, most importantly programs in education and applied science.
• Services specifically designed to meet the needs of statewide and regional economic development—continuing professional education, technical and professional services, support of small businesses and entrepreneurs, and technology transfer.

Special Features

Institute for Economic Advancement
Nanotechnology Center
UALR-UAMS joint academic and research programs.
UALR Role and Scope Developed by the UALR Faculty Senate

The University of Arkansas at Little Rock offers certificates and degree programs at the associate, baccalaureate, master’s, specialist, and doctoral levels. Disciplines in which degrees are offered include applied science, the arts; business, health, and public administration; communication; education; engineering technology; the humanities; law; social, physical, and life sciences; and social work. The institution emphasizes the liberal education of undergraduate students and offers more focused professional study, particularly at graduate levels.

The University of Arkansas at Little Rock, taking advantage of its metropolitan location, offers programs and services that respond to the special needs and interests of individuals, organizations, institutions, businesses, and governmental units. Academic programs, student services, research activities, public service projects, and institutional policies reflect the University’s commitment to a diverse student body composed of recent high school graduates, students returning to school after other experiences, retirees, international students, disabled students, and professionals seeking career change or enrichment. A significant percentage of these students attend school part-time and work full- or part-time. As a result, many UALR students bring experience and a high level of motivation into the classroom.

The University of Arkansas at Little Rock strives to make higher education accessible to all those who can benefit. The institution’s academic courses are offered in flexible and varied time periods and learning formats, at off-campus locations as well as in traditional classrooms, and by radio, telecommunication, and newspaper. In all of these forms the quality of instruction is of paramount importance. The University has a nationally recognized scholars program and curriculum, honors courses, and other programs for superior students. Specialized programs and assistance are offered to educationally disadvantaged students. The University is committed to international education, supporting programs and courses that attract international students and offer opportunities for all students to explore and experience other cultures.

The University of Arkansas at Little Rock recognizes its responsibility to contribute to bodies of knowledge through research as well as to disseminate ideas through instruction. The University fosters both basic and applied research appropriate to its programs and faculty. The University supports grant applications and other attempts to gain sponsorship for research. Many research activities address the problems of Arkansas as it interacts with an increasingly complex and interdependent world.

The University of Arkansas at Little Rock shares its resources with the larger community through public service. Activities include noncredit educational offerings ranging from college preparatory classes to courses for personal enrichment and awareness; special programs for pre-collegiate students; programs for professional advancement; and institutes and centers to focus research and study on such areas as teaching and learning, technology, government, management, and urban affairs. The University serves the State of Arkansas in economic development through assistance from businesses, seminars for managers and workers, and support for entrepreneurial ventures. The University provides leadership in cultural enrichment and makes its resources available to the community. Relationships with local, state, and national governments and with business and industry strengthen the curriculum and provide students and faculty opportunities to apply theory and research.

The University anticipates continued growth in the number of students and in the number and size of academic programs. The primary aim of the University in all of its varied activities will continue to be maintaining and improving the quality of education for all its students.

(Adopted by the UALR Faculty Senate, 1988)

Accreditations and Affiliations

The University of Arkansas at Little Rock is fully accredited by the North Central Association of Colleges and Schools. UALR is also a Service-Members Opportunity College.

Specific degree programs are also accredited or affiliated with many external accrediting/certifying bodies. A complete list can be found on the Accreditation website (http://ualr.edu/accreditation).

Assessment

Units across campus regularly engage in research to assess UALR’s success in meeting these objectives. Assessment at UALR is designed to help the academic programs – whether core, undergraduate, or graduate – focus on what should be taught in the program and whether it is being taught successfully.

This involves a variety of methods of inquiry to examine student needs, attributes, and success in learning. Each academic unit at UALR has an assessment program to conduct research that will be used to make decisions to improve its curriculum, instruction, and both academic and career advising. Students, alumni, and various stakeholders participate in a variety of assessment activities designed to assess learning in the major and in the core curriculum.
The University of Arkansas at Little Rock falls under the University of Arkansas System. A complete listing of the Administration and Staff is found in the back of this catalog.

The Chancellor is the executive officer of UALR. The Provost and Vice Chancellor of Academic Affairs is the chief academic officer of UALR and provides academic and administrative leadership in the area of academic and faculty affairs. All of our programs of study fall under a specific department or school, which in-turn fall under a specific college. Please see the chart below.
Educational, Student Services, and Student Life

The Division of Educational and Student Services provides quality support and services to UALR’s students, and maintains relationships with academic departments, students, and community groups. The Vice Chancellor for Educational and Student Services has the general responsibility for coordinating services to students. These services include Admissions and Financial Aid, Records and Registration, the UALR Bookstore, Counseling and Career Planning, dining services, Disability Resource Center, fitness and aquatics, Health Services, Housing, intramural and recreational activities, orientation programs, student activities, and Testing Services and Student Life Research. Please see the chart below.

Other Administrative Areas

Office of the Vice Chancellor for Information Services: Computing Services, Desktop Support Services, Management of Information Systems, and Networks

Office of the Vice Chancellor for Finance and Administration: Administrative Services, Human Resources, Facilities Management, Public Safety, Bursar, Financial Services, Mail Services, and Purchasing

Office of the Vice Chancellor for University Advancement: Office of Communications, Alumni, and Children International

Office of the Vice Chancellor for Development
CONTENTS

Chancellor’s Welcome ........................................... i
About the Catalog ........................................... ii
About the University of Arkansas at Little Rock ......................................... iii
Academic Organizations .................................... vii
Academic Calendar ............................................. 1
General Policies .................................................. 4
Academic Policies & Requirements ......................... 6
Admissions .......................................................... 11
Financial Aid and Scholarships ......................... 14
Picking a Major .................................................... 16
Checklist for Getting Started .......................... 18
Academic Advising ............................................. 19
Majors by Type .................................................... 20
Degree & Graduation Requirements .................. 21
General Education Requirement (UALR Core Curriculum) .............................. 24
Registration Guide ............................................. 28
Four-letter Course Codes ................................ 29
Tuition and Fees ................................................... 30
Transfer Student Services ................................. 32
International Services ......................................... 35
Student Services .................................................. 37
Intensive English Language Program (IELP) ......................................................... 42
Interdisciplinary Study .................................... 43
Secondary Teacher Licensure .......................... 45
Extended Programs ............................................. 52
University College .............................................. 53
   Associate of Arts in General Studies .................. 53

College of Arts, Humanities, & Social Sciences ........................................... 54
   Department of Art ............................................. 56
   Department of English ..................................... 67
   Department of History ....................................... 71
   Department of International & Second Language Studies ................................... 78
   Department of Music ......................................... 85
   Department of Philosophy & Liberal Studies .................................................. 92
   Department of Political Science ........................................... 97
   Department of Psychology ................................ 104
   Department of Rhetoric & Writing .................................. 108
   Department of Sociology & Anthropology ............................................. 111
   Department of Theatre Arts & Dance ........................................... 116

College of Business ........................................... 120
   Department of Accounting ................................ 122
   Department of Economics & Finance ........................................... 125
   International Business Program ........................................... 130
   Department of Management ................................ 131
   Department of Marketing & Advertising ........................................... 136

College of Education ........................................... 139
   Department of Counseling, Adult, & Rehabilitation Education .................. 143
   Department of Educational Leadership ........................................... 147
   Department of Teacher Education ........................................... 148

Donaghey College of Engineering and Information Technology .................. 154
   Department of Computer Science ........................................... 156
   Department of Construction Management and Civil and Construction Engineering ........................................... 163
   Department of Engineering Technology ........................................... 173
   Department of Information Science ........................................... 182
   Department of Systems Engineering ........................................... 188
For the most complete and accurate Academic Calendar:
http://ualr.edu/www/events

### August

<table>
<thead>
<tr>
<th>Su</th>
<th>Mo</th>
<th>Tu</th>
<th>We</th>
<th>Th</th>
<th>Fr</th>
<th>Sa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>37</td>
<td>38</td>
<td>39</td>
<td>40</td>
<td>41</td>
<td>42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### September

<table>
<thead>
<tr>
<th>Su</th>
<th>Mo</th>
<th>Tu</th>
<th>We</th>
<th>Th</th>
<th>Fr</th>
<th>Sa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### October

<table>
<thead>
<tr>
<th>Su</th>
<th>Mo</th>
<th>Tu</th>
<th>We</th>
<th>Th</th>
<th>Fr</th>
<th>Sa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### November

<table>
<thead>
<tr>
<th>Su</th>
<th>Mo</th>
<th>Tu</th>
<th>We</th>
<th>Th</th>
<th>Fr</th>
<th>Sa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### December

<table>
<thead>
<tr>
<th>Su</th>
<th>Mo</th>
<th>Tu</th>
<th>We</th>
<th>Th</th>
<th>Fr</th>
<th>Sa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fall 2012**

**August**
- 22 Freshman Convocation
- 23 Fall Classes Begin
- Late Registration
- 25 Saturday Classes Begin
- 29 Late Registration Ends

**September**
- 3 Labor Day Holiday (No Classes, University Closed)

**October**
- 3 Last Day to Remove an "I" Received in Summer 2
- 5 Graduation Application for Fall, 5 p.m.
- 15 Mid-Term Grades Available to Students

**November**
- 6 Last Day to Remove an "I" Received in Summer 1
- 7 Last Day to Remove an "I" Received in Summer 4
- 16 Last Day to Drop an Individual Class, 5:00 p.m.
- 21 All Classes End at 5 p.m. for Thanksgiving Holiday
- 22-25 Thanksgiving Holiday (No Classes, University Closed)

**December**
- 10 Last Day of Classes
- Last Day to Withdraw from All Classes, 5 p.m.
- 11 Consultation Day/Finals Begin
- 20 Fall Commencement
- 21 Grades Due By Noon
<table>
<thead>
<tr>
<th>Week</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Su</td>
<td>Mo</td>
<td>Tu</td>
<td>We</td>
<td>Th</td>
<td>Fr</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

**Winter 2013**

**January**
- 14 **Spring Classes Begin**
- 19 **Saturday Classes Begin**
- 21 **Martin Luther King Holiday, (No Classes, University Closed)**

**February**
- 1 **Academic Scholarship Final Deadline**

**March**
- 12 **Last Day to Drop an Individual Class, 5:00 p.m.**
- 13 **Last Day to Remove an "I" Grade for Fall 2012**
- 18-24 **Spring Break, No Classes**
- 22 **University Closed**

**April**
- 6 **Last Day of Classes**
- **Last Day to Withdraw From All Classes, 5:00 p.m.**
- 7 **Consultation day, Finals Begin, 4:00 p.m.**
- 17 **Grades Due By Noon**
- 18 **Spring Commencement**
- 27 **Memorial Day Holiday, (No Classes, University Closed)**
**SUMMER 1-2013**

**MAY**
- 27 Memorial Day Holiday, (No Classes, University Closed)
- 28 Classes Begin
  Late Registration- To Be Determined

**JULY**
- 4 Independence Day Holiday, (No Classes, University Closed)
- 26 Last Day to Drop an Individual Class, 5 p.m.

**AUGUST**
- 5 Last Day to Withdraw From All Classes, 5 p.m.
- 6 Last Day of Classes, Finals
- 8 Grades Due By Noon

**SUMMER 2-2013**

**MAY**
- 27 Memorial Day Holiday, (No Classes, University Closed)
- 28 Classes Begin
  Late Registration- To Be Determined

**JUNE**
- 24 Last Day to Drop an Individual Class, 5 p.m.
- 28 Last Day to Withdraw From All Classes, 5 p.m.

**JULY**
- 1 Last Day of Classes, Finals
- 3 Grades Due By Noon
- 4 Independence Day Holiday, University Closed

**SUMMER 4-2013**

**JULY**
- 4 Independence Day Holiday, (No Classes, University Closed)
- 8 Classes Begin
  Late Registration- To Be Determined

**AUGUST**
- 2 Last Day to Drop an Individual Class, 5 p.m.
  Last Day to Withdraw From All Classes, 5 p.m.
- 9 Last Day of Classes, Finals
- 13 Grades Due By Noon
GENERAL POLICIES

Right to Change the Catalog
Policies and procedures stated in this Catalog require continuing evaluation, review, and approval by appropriate University officials. All statements reflect policies or procedures in existence at the time this Catalog went to press. The University reserves the right to change policies at any time and without prior notice.

Equal Access for Students with Disabilities
It is the policy of the University of Arkansas at Little Rock to create inclusive learning environments. If there are aspects of the instruction or design of a course that result in barriers to your inclusion or to accurate assessment of achievement—such as time-limited exams, inaccessible web content, or the use of non-captioned videos—please notify the instructor as soon as possible. Students are also welcome to contact the Disability Resource Center (DRC), telephone (501) 569-3143 (v/tty). For more information, visit the DRC website.

Family Educational Rights and Privacy Act (FERPA)
Students at the University of Arkansas at Little Rock have certain rights with regard to their educational records as stipulated by the Family Educational Rights and Privacy Act (FERPA). Students should consult the UALR Student Handbook for the delineation of those rights.

HIV
In support of its mission to discover and disseminate knowledge and to promote humane sensitivities and understanding of interdependence, the University of Arkansas at Little Rock endorses the following policy for responding to Human Immunodeficiency Virus (HIV) infection.

Based on conclusive evidence from the U.S. Public Health Services and Centers for Disease Control and Prevention, people living with HIV infection pose no threat of transmission through casual contact to those who are not infected. Because many people are infected and don’t know it, the University accepts an inclusive approach that recognizes any individual could be HIV positive. No screening or inquiries regarding HIV status will be made for admission or employment.

Access
People with HIV/AIDS are protected from discrimination by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. Appropriate, reasonable accommodations will be made for students and employees who are infected and they will be accorded all rights of access and responsibilities in every aspect of University life as available to not infected persons. Acts of discrimination or abuse will not be tolerated. Confidentiality will be observed.

Prevention and Education
The University will provide ongoing training for students and employees that includes the following:
• Facts about infection, transmission, prevention, testing sites, and disclosure
• Skill development and equipment for self protection
• A climate that fosters care and respect for self and others

For information about educational programs contact the Offices of Health Services or Human Resource Services.

Support Services
The Health Services Office is the primary point of confidential contact for people living with HIV and will serve as a resource to the campus community regarding HIV issues on campus.

Support services and referrals are also available in the following offices: Counseling and Career Planning Services, Disability Resource Center, and the Arkansas Employee Assistance Program.

Policy Implementation and Review
The University Health and Wellness Committee will be responsible for implementation of this policy. They will review this policy semi-annually or as scientific information emerges and submit revisions to the University Assembly for approval. (Adopted by the Faculty Senate, 4/19/96)

Name Changes
U.S. Citizens
In order to comply with a number of government agency reporting requirements, the University must record each student’s name as it appears on his/her social security card. Students who need to change their names on UALR records must complete a name change form (available at the Office of Records and Registration) and present a social security card and picture identification when submitting the form. After the change is implemented, the name on the UALR transcript, diploma, and other documents will read as printed on the social security card. If the social security card is incorrect, students must change their records with the Social Security Administration Office first. No changes will be made to the UALR record until a new Social Security Card is issued and presented to the Office of Records and Registration.

International students
International students who need to change their names on UALR records should consult with the Director of Records and Registration, who will specify appropriate documentation.
Nondiscrimination

UALR adheres to a policy that enables all individuals, regardless of race, color, gender, national origin, age, religion, sexual orientation, veteran's status, or disability, to work and study in an environment unfettered by discriminatory behavior or acts. Harassment of an individual or group will not be condoned, and any person (student, faculty, or staff member) who violates this Policy will be subject to disciplinary action.

Harassment that is considered discriminatory includes actions or conduct (verbal, graphic, gestural, or written) directed against any person or group with the intent to demean or create a hostile or threatening environment. It is not the intent of this Policy to infringe upon or limit educational, scholarly, or artistic expression. Any person who believes he or she has been discriminated against should contact the Office of Human Resources to obtain assistance and information concerning the filing of complaints, (501) 569-3180.

At the same time the university prohibits discriminatory practices, it promotes equal opportunity through affirmative action. Non-discriminatory affirmative action equal opportunity policies apply to recruitment, hiring, job classification and placement, work conditions, promotional opportunities, demotions/ transfers, terminations, training, compensation, choice of contractors and suppliers of goods and services, educational opportunities, disciplinary action, recreational and social activities, use of facilities, housing and university-sponsored programs.

Prohibiting Sexual Harassment

It is the policy of the University of Arkansas at Little Rock to prohibit sexual harassment of its students, faculty, and staff.

Incidents of sexual harassment are demeaning to all persons involved and impair the ability of the institution to perform its educational functions.

Sexual harassment of employees is prohibited under Title VII of the Civil Rights Act of 1964, and sexual harassment of students may constitute discrimination under Title IX of the Education Amendments of 1972. Sexual harassment of employees is defined by the Equal Employment Opportunity Commission to include unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct which takes place when: submission to the conduct is either explicitly or implicitly a term or condition of an individual’s employment; submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting that individual; or such conduct has the purpose or effect of unreasonably interfering with an individual’s work performance or creating an intimidating, hostile, or offensive working environment.

Sexual harassment of students includes unwelcome sexual advances, requests for sexual favors, other verbal or physical conduct which take place when: submission to the conduct is either explicitly or implicitly a term or condition of an individual’s academic status or advancement; submission to or rejection of such conduct by an individual is used as the basis for academic decisions affecting that individual; or such conduct has the purpose or effect of unreasonably interfering with an individual’s academic performance or creating an intimidating, hostile, or offensive learning environment. Employees and students who believe that they have been subjected to sexual harassment are encouraged to report the problem.

University grievance procedures are available to individuals who wish to pursue complaints of sexual harassment. Informal complaints should be made to an ombudsman for sexual harassment. The goal of the informal process is to resolve problems. No disciplinary action will be taken as a result of the informal complaint procedure. Formal complaints against faculty, staff and administration should be submitted to the Office of Human Resources. Both formal and informal complaints should be made within 30 calendar days of the most recent alleged discriminatory act.

Sexual Assault

(UALR's complete policy on sexual assault appears in the UALR Student Handbook and the policy website-http://ualr.edu/policy.)

The University of Arkansas at Little Rock explicitly condemns sexual assault as a violation of an individual’s human rights and dignity. Sexual assault is generally defined as attempted or actual unwanted sexual activity. The policy of UALR is that members of the University community neither commit nor condone sexual assault in any form. This prohibition applies equally to male and female staff, faculty and students, to all other persons on premises subject to University control, and to those engaged to further the interests of the University.

Sexual assault is unlawful and may subject those who engage in it to civil and criminal penalties. A student or employee of UALR charged with sexual assault can be prosecuted under Arkansas criminal statutes and/or disciplined by the University. Even if criminal prosecution is not pursued, the University can pursue disciplinary action. Where there is probable cause to believe that the campus regulations prohibiting sexual assault have been violated, the campus will pursue strong disciplinary action through its own internal judicial channels. This discipline includes, but is not limited to, the possibility of termination, expulsion, suspension, disciplinary probation, counseling, mediation, educational sanctions, or a combination of these. Any conduct that constitutes a sexual offense under Arkansas law is also subject to disciplinary sanctions under this policy.

Victims of sexual assault have the right to file criminal charges with local law enforcement authorities and, upon request, are entitled to assistance from the University in notifying those authorities. Victims also have the right to file a complaint with the University to have a sexual assault allegation investigated by the University, and the right to participate in any disciplinary proceedings regarding the sexual assault complaint. Because of the traumatic nature of sexual assault, victims are strongly encouraged to seek professional help. On campus, free and confidential counseling services and referrals are available at Counseling and Career Planning Services in Ross Hall 417. Due to the nature and value of evidence, it is important that any sexual assault be reported as soon as possible. A complaint should be filed with the University within 30 days of the incident. The initial complaint may be filed with any of these University offices:

• The Department of Public Safety
• The Office of Campus Life The Office of Human Resources

Smoke-Free Campus

The University of Arkansas at Little Rock is a smoke-free campus. This policy originated in recommendations from the Student Government Association and the University Assembly. This policy applies to all locations of the University, including the main campus, the William H. Bowen School of Law, and the UALR Benton Center. All individuals are expected to comply with this policy. Persons who fail to comply are subject to disciplinary action. (Chancellor’s Office, 8/16/09)
Academic Policies & Requirements

Academic Adjustment

In compliance with federal regulations, it is the policy of UALR to respond to student requests for course accommodation, substitution, and other adjustments because of a documented disability on an individual basis and in a manner that does not result in discrimination. Where requests are complex and not easily handled through the regular course substitution procedures, an established committee will review the case and make a determination.

Students who wish to request academic adjustments because of a disability should consult the academic adjustment procedures, which are printed in the UALR Student Handbook, or contact Disability Resource Center at (501) 569-3143.

Academic Hours

UALR students are encouraged to spend sufficient time outside of classes to master the subject content of their courses. Academic working hours include the time spent in classes as well as the time spent outside of classes on homework. The number of academic working hours can vary widely from student to student, depending on the preparation and ability of the student, the norms of different academic disciplines, and the expectations of individual faculty members. However, an average academic workload can be estimated from the general thumb rule that at least two hours of homework per hour of classes are necessary for an average student to master subject content with average (‘C’) grades. Thus, the minimum number of academic working hours per week can be estimated by multiplying total credit hours by a factor of three. For example, a full-time student taking 15 credit hours should plan to spend at least 45 academic working hours per week attending classes and doing homework, e.g., reading, writing, studying, etc. Mastering the subject content of courses with higher average (‘B’) or superior (‘A’) grades may require more time and effort. Finally, since mastery of subject content is the goal, no amount of study time can guarantee academic success—course grades and course credits are awarded for mastery of subject content, not time on task.

Academic Offenses

The most common offenses subject to grade penalty and/or disciplinary action are:

- Cheating on an examination or quiz: To give or receive, to offer or solicit information on any quiz or examination including (a) copying from another student’s paper; (b) using prepared materials, notes, or texts other than those specifically permitted by the professor during an examination; (c) collaborating with another student during an examination; (d) buying, selling, stealing, soliciting, or transmitting an examination, or any material purported to be the unreleased content of an upcoming examination, or the use of such material; (e) substituting for another person during an examination or allowing such substitution for oneself; (f) bribing a person to obtain examination information.
- Plagiarism: To adopt and reproduce as one’s own, to appropriate for one’s own use and incorporate in one’s own work without acknowledgment, the ideas of others or passages from their writings and works.
- Collusion: To obtain from another party, without specific approval in advance by the professor, assistance in the production of work offered for credit to the extent that the work reflects the ideas or skills of the party consulted rather than those of the person in whose name the work is submitted.
- Duplicity: To offer for credit identical or substantially unchanged work in two or more courses, without specific advance approval of the professors involved.

The university has developed certain regulations to make possible an orderly academic environment where all members of the community have the freedom to develop to the fullest extent.

Academic dishonesty cannot be condoned or tolerated in the university community. Such behavior is considered a student conduct violation and students found responsible of committing an academic offense on the campus, or in connection with an institution-related or sponsored activity, or while representing the university or academic department, will be disciplined by the university.

Academic Probation

Students will be placed on academic probation at the end of a term if their cumulative grade point average (GPA) drops below a 2.0 GPA. Students on academic probation are limited to a maximum of 13 credit hours each semester. Students will continue on academic probation as long as their cumulative GPA continues to remain below a 2.0 GPA.

That effective fall 2011, freshmen and sophomores with an academic standing of Academic Probation or Probation Continued be required to participate in a special program offered by the Academic Success Center beginning the next semester in which they are enrolled for at least one hour. International Freshmen and International Transfer Students on academic probation will report to the Office of International Student Services. Student athletes on academic probation will report to the Academic Advisor or their coach in Athletics. Non-Degree Seeking Students are exempt from this requirement. A mechanism for waiving the requirement on a case-by-case basis for other students for whom physically reporting to the Academic Success Center is a practical impossibility—for example, students taking all online courses from a great distance from Little Rock—will be implemented.

Students will remain in the program until their cumulative GPA rises above 2.0 or they are academically suspended (after three consecutive semesters on probation).

Program activities will be tailored to fit the needs of the individual student based on the outcome of the intake assessment and the student will be assigned to a mentor. A contract will be signed by the student and the mentor.

Students needing fewer than 18 credit hours for graduation may request an exemption for the credit hours restriction to their academic advisor or department chairperson. Denial of this request may be appealed to the dean of the college and the provost.
Advanced Placement Program

Advanced Placement (AP) examinations are administered by selected secondary schools. Students who take AP exams should have official score reports sent directly to the UALR Office of Testing Services for evaluation. You may also contact the College Board at (888) 225-5427 to request scores be released to UALR; the school code for UALR is 6368. A list of AP course eligibility, exemption, or credit by score may be found on the Testing Services and Student Life Research website.

Attendance Requirements

Each faculty member has the prerogative of setting specific attendance requirements for classes. In some courses, active student participation is an integral part of the course, and the instructor may base a portion of the students’ grades on attendance and participation. In general, students are expected to attend class regularly. Students who miss class are responsible for finding out about the material covered, homework assignments, and any announcements or examinations.

On the 10th day of classes, students who have not attended in class will be administratively withdrawn by the instructor. Students may be administratively withdrawn from a class by the instructor for excessive absences during the semester.

Auditing a Course

A student who may enroll in a course but not participate in the formal assignments of the class nor receive a grade or credit. Enrollment is entered on the student’s permanent record. Criteria to receive the audit grade may be set forth by the instructor of the course. Auditing is subject to the professor’s approval and the payment of the applicable fees. Auditors may not change their registration to credit after the deadline listed in the academic calendar, which is normally the end of the registration period.

Changes in Enrollment (Course Drop Dates)

A student can drop a course up to the 5th day of classes through the schedule change process. Dropping a course in this time period will not result in a record of the drop on the student’s transcript. From the 6th day through the 41st day of classes, a student wishing to drop a class obtains from the course instructor a signed acknowledgement of the drop and completes the course drop process by submitting the form, to the Office of Records and Registration. Courses cannot be dropped after the 41st day of classes. The cut-off dates in this paragraph refer to the day of classes in a 15-week semester (five days=one week). In shorter semesters the cut-off dates will be adjusted proportionately. See the “Academic Calendar” for course drop dates.

Clemency

Any undergraduate student who has previously attended UALR or its predecessor institutions (Little Rock Junior College or Little Rock University) and whose attendance at UALR or any institution of higher education has been interrupted for a period of at least two years may qualify to request academic clemency. Under this policy a student may apply to have grades and credits earned at UALR previous to the separation removed from his or her grade point average. Approval of a request for clemency requires the signature of the student’s advisor and the provost.

After re-entering UALR following a separation of at least two years from any institution of higher education, a student may request academic clemency at the Office of Records and Registration. The student shall specify the term(s) for which clemency is desired. The request will be forwarded, along with appropriate permanent record information, to the student’s advisor for approval. The advisor shall forward the request to the provost.

Clemency shall cover all credits earned during the term(s) for which clemency is requested. A student who requests and receives academic clemency is ineligible to graduate with honors. The student’s complete record will remain on the transcript with the added notation of academic clemency received.

Any petition for academic clemency must be requested and granted prior to the awarding of a degree. Once the degree is awarded, the record is closed and the academic clemency policy cannot be invoked.

Academic clemency may be approved only once. For purposes of degree requirements, a student who receives clemency must follow the provisions of the Undergraduate Catalog in effect at the time of re-enrollment.

Course Eligibility Standards and Developmental Course Options

Course Eligibility

RHET 1311 Composition I:

A minimum ACT English score of 19, a minimum SAT Writing score of 470, or a minimum COMPASS score of 75 is required for enrollment in RHET 1311 Composition I. RHET 0310 Composition Fundamentals is offered for students who do not meet the minimum requirement for Composition I.

Honors Composition:

Students with an ACT English score of 29 or greater, an SAT Writing score of 650 or greater, or a COMPASS score of 99 or greater are automatically exempted from Composition I. They may enroll either in Honors Composition or in Composition II to complete the core curriculum composition requirement.

RHET 1320 Honors Composition:

Students with an ACT English score of 27 or greater, an SAT Writing score of 610 or greater, or a COMPASS score of 98 or greater who also have an A or B in high school English are invited to enroll in RHET 1320 Honors Composition.

Students who feel they qualify for Honors Composition but who do not receive invitations should contact the Department of Rhetoric and Writing at (501) 569-3160. The three-hour Honors Composition course satisfies the core curriculum requirement.

MATH 0321 Pre Core Mathematics I:

• ACT math score of 19-20.
• SAT Math score < 500.
• COMPASS Algebra score of < 49.

Math 1302 College Algebra MATH 1315 College Mathematics 1, or MATH 1321 Quantitative and Mathematical Reasoning:

• ACT Math score of 21+.
• SAT Math score of 500+.
• COMPASS Algebra score of 49+ or College Algebra score of 40+.

MATH 1303 Trigonometry, MATH 1342 Business Calculus, or MATH 1311 Applied Calculus I:

• ACT Math Trig score of 14+.
• COMPASS College Algebra Exam of 59.

MATH 1451 Calculus I:

• ACT Math Trig score of 14+.
• COMPASS Trigonometry score of 46+.

Placement and credit validation in second languages

Students who have acquired language skills before enrolling at UALR may request a test to find the level at which to enroll. If the final grade in that course is B or greater, the student will be awarded credit for the prerequisites (up to 12 hours).

1 Will no longer be offered after Fall 2012.
Course Load and Enrollment Limits
UALR must define enrollment statuses by mandate of the U.S. Department of Education. These definitions are used to determine eligibility for financial aid and scholarships, and are used consistently throughout the campus.

• A full-time undergraduate student must be enrolled for a minimum of 12 credit hours a semester.
• A three-quarter-time undergraduate student must be enrolled in 9 to 11 hours a semester.
• A half-time undergraduate student must be enrolled in 6, 7, or 8 hours a semester.

Undergraduate summer semester enrollment hours include hours from all summer terms. The full-time, three-quarter, and half-time enrollments are the same as fall or spring semesters. Course load definitions for graduate students are different and can be found in the UALR Graduate Catalog.

A student may not enroll for more than 18 credit hours in a regular semester (Fall or Spring) or more than 7 credit hours in a five-week Summer term without prior permission of the person who approves his or her degree plan.

Courses Taken by UALR Students at Other Colleges and Universities
Students may choose to enroll at another regionally accredited academic institution while attending UALR. In order to assure that the credit for coursework to be taken elsewhere meets UALR degree program requirements, students should contact the Office of Transfer Support Services if the course is to count toward core requirements, and contact their major advisor if the course is to count toward major or minor requirements. This should be done prior to taking the coursework.

Credit by Examination
UALR offers students the opportunity to obtain credit through examination in certain courses. There are currently six sources of examination credit:

• Departmental Examination Program (DEP)
• College Level Examination Program (CLEP)
• Excelsior College Examinations (formerly Regents College and ACT-PEP)
• Advanced Placement Program (AP)
• Defense Activity for Non-Traditional Education Support (DANTES)
• International Baccalaureate (IB)

All tests conform to these general regulations:

• Students who successfully test out of a course shall receive credit hours for that course with a credit grade (CR) but no grade points.
• The examination shall be administered at least once per semester and in such a manner as to facilitate access by the student.
• Departmental tests and CLEP subject examinations are administered at UALR. Excelsior College Examinations are computer-based tests administered at Pearson VUE Testing Centers. Any prospective, currently enrolled, or continuing student may take these tests.

Students who take CLEP, AP, DANTES, IB or Excelsior College Examinations should have official score reports sent directly to the UALR Office of Testing Services for evaluation. Credit obtained through examination is recorded as approved hours on the student’s official, permanent record without grade or grade points after the student has been enrolled at UALR for one semester. Additional information may be obtained from Testing Services by calling (501) 569-3198 or at the website.

Developmental Courses
If a student does not meet the minimum score for eligibility in math, composition, and/or reading, that student must be enrolled in a developmental course to gain the skills necessary to be successful in those classes. The developmental courses at UALR are MATH 0321 Pre-Core Mathematics I, RHET 0310 Composition Fundamentals, and RHET 0321 Academic Literacy. UALR’s admission policy requires that all developmental courses be completed during a student’s first 42 hours of course work.

Students may not take any developmental course at UALR more than twice. A student is considered to have taken a developmental course if he or she receives a grade of NC or W for the course. Students who have failed to pass a particular developmental course twice should speak to their advisors or the department offering the course to explore other options for covering the material. A student is not considered to have taken a developmental course if he or she has been granted academic clemency since that time.

Developmental Courses and GPA
Grades from developmental courses will not be computed into a student’s official grade point average (GPA). Credit hours earned from developmental courses do not count towards the minimum required for the student’s degree.

Dual Credit
Students may count two courses, up to eight hours, toward both major and minor requirements. (Limitations may exist in some programs. Students should check with their advisors.)

Dual Major versus Double Degree
Students who are completing two majors, may pursue either of the following options:

1. Dual Majors means that a student will complete the requirements for both majors but will earn only one bachelor’s degree and receive only one diploma after successful completion. The degrees for both majors must be the same, i.e., a B.A. in History and a B.A. in English.
2. Double degree means that a student will complete the requirements for both majors. Students pursuing this option must submit two graduation applications and will receive two diplomas after successful completion.

Final Examinations
Final examinations must be taken at the time scheduled. Makeup examinations may be given to students who, because of unforeseeable circumstances involving illness, accident, or serious family emergency, were unable to take the regular examination. Such exams will be given only on the approval of the instructor and the department chairperson.

Grade Changes
All grade changes must be approved by the department chairperson under whose jurisdiction the course was taught. Forms for securing that approval are available in the departmental offices. Grades cannot be changed after a student graduates from UALR.

A final course grade may not be changed on the basis of a second final examination or additional course work undertaken or completed after a student’s final course grade has been reported by the instructor to the Office of Records and Registration.

Students at UALR have the right to appeal any grade that they feel was undeserved. The formal process through which a student can appeal a decision on a final grade is described in detail in the “Grade Appeals” section of the UALR Student Handbook, which is available in the Office of Educational and Student Services, Dean of Students, website.

Grades and Grading System
Grade reports are made available on-line to each student at the end of each semester in residence by accessing BOSS. If written confirmation is needed, contact the Office of Records and Registration.
Students may take one course each semester on a CR/NC basis with instructor approval arranged at the time of registration. The selection of courses is limited to electives. Courses in which a department requires CR/NC grading are not included in this limitation.

The designation I, or incomplete, is appropriate where the instructor deems that circumstances beyond the student's control prevented timely completion of course requirements. The designation normally is given by the instructor only after consultation with the student and after the student has been informed in writing; additionally, a copy of the written notice is filed with the department chairperson regarding work to be completed and the completion date.

The work must be completed and the I converted by the instructor to the appropriate grade within 90 days for undergraduate courses and within one year for graduate courses from the time the I was recorded. Failure to do so will result in the I being administratively changed to an F.

A request to extend the deadline to complete an I must be completed by the instructor and forwarded to the Office of Records and Registration prior to the 90-day expiration date. The request must include a specific date by which all course work will be completed.

**Graduation**

Students must apply no later than the end of the sixth week of the fall or spring terms to be considered for graduation for that term. To be considered for summer graduation, students must apply by the end of the second week of Summer II (refer to the Office of Records and Registration website for exact dates). Application submission by the deadline will normally assure a graduation confirmation decision at the end of the designated semester. Applications received after the deadline may not be processed prior to the conferral date. If the student does not meet the original expected term graduation date, he or she must reapply.

To be included in the Fall or Spring Commencement Program, all fall or spring applicants must submit their application online by the date published in the UALR Registration Guide and Class Schedule for the semester. The application for graduation is completed by going to the secure portion of BOSS.

Go to BOSS and log in.

Once you log in select “Student Services and Financial Aid” and select “Student Request Menu” to complete the online application.

Program printing deadlines will not enable the University to include the names of students submitting applications after the deadline. Please refer to the UALR Registration Guide and Class Schedule for more information.

Students will normally receive their diplomas within six weeks of the fall or spring conferral dates assuming the deadline is met. Summer graduates must submit their applications by the end of the second week of Summer 2 to ensure a September diploma delivery. Undergraduate students are not charged a graduation fee.

In order to be awarded a degree in the term of graduation, a student must complete all requirements and obligations no later than the date grades are due as listed in the “Academic Calendar” section of this catalog. This includes but is not limited to grades of I, MG, and IP. Students failing to meet this deadline must reapply for graduation and will be awarded their UALR degree the following term, provided all requirements have been met.

**Honors**

**Chancellor’s and Dean’s List**

Names of students whose academic performances have been superior are recorded on the Chancellor’s and the Dean's Lists. This recognition is also noted on the student’s grade report and on official transcripts. This status will be granted at the end of each semester in which the following qualifications have been met:

- **Chancellor’s List:**
  - At least nine hours for credit with a grade of A, B, C, or CR
  - At least a 3.9 grade point average for the semester
  - No D, F, I, or NC grades on the semester grade report

- **Dean’s List:**
  - At least nine hours for credit with a grade of A, B, C, or CR
  - At least a 3.5 grade point average for the semester
  - No D, F, I, or NC grades on the semester grade report

**Departmental Honors**

Several departments at UALR offer honors programs to exceptional students. Admission to an honors program is generally tied to the student’s grade point average and year standing and may require nomination by a faculty member. Such programs are distinct from graduation with honors; in addition to meeting and maintaining a certain grade point average, qualifying students take a special curriculum in the major. Requirements may include advanced study, seminars, or a research project and presentation. Departmental honors are posted on the student’s academic transcript at graduation. Contact individual departments for more information.

**Graduation Honors**

Graduation honors are calculated on all academic work including all UALR credit courses, all repeated courses and all work completed at all other institutions, whether accepted as transfer credit at UALR or not.

The bachelor’s degree with honors will be conferred upon candidates who graduate and earn a minimum cumulative grade point on all courses taken (both transfer courses and credit courses at UALR) as follows:

- **Summa cum laude:** minimum grade point average of 3.90
- **Magna cum laude:** minimum grade point average of 3.70
- **Cum laude:** minimum grade point average of 3.50

A minimum of 30 hours in residence at UALR is required to qualify for a degree with honors. A student qualifies for honors based on the grade point average on all hours, including repeated courses at UALR and including transfer hours whether or not accepted for credit.

All academic work, including transfer courses and repeated courses, is included in the final calculation for honors. Some courses from institutions outside of the U.S. are calculated in the admissions process on a pass/not pass basis. In order for a student to be considered for honors, all credentials from institutions outside of the U.S. must be evaluated to determine an A, B, or C equivalency.
The associate degree with honors will be conferred upon candidates who at graduation have earned a minimum cumulative grade point on all college work (both transfer and residence credit) of 3.70. The recipient must have met all requirements for graduation with an associate degree and must not have completed more than 83 credit hours. A UALR student can be awarded graduation honors only once. Students who graduate from another college or university and pursue a second undergraduate degree at UALR are not eligible for honors. University and departmental honors (but not awards) may be posted on the academic transcript.

Military Service Credit

In 2008, the UALR Faculty Senate, by unanimous vote, approved legislation pertaining to acceptance of college credit acquired by military members whereas, “…military credit that has been certified by the American Council on Education as equivalent to college level courses shall be accepted for transfer into UALR.”

Official transcripts must be provided for evaluation. Active-duty Soldiers and Veterans of the Army, Army National Guard, and US Army Reserve may request transcripts at the AARTS website. Navy and Marine Corps personnel may request transcripts at the Navy College Website. Air Force members may request CCAF transcripts at the CCAF website.

UALR’s military website (http://ualr.edu/military) contains transcript information, links, and more.

Repeated Courses

If an undergraduate student repeats a course for credit, only the last grade will be computed into the cumulative grade point average. (The earlier grade will remain on the transcript with an “E” indicating exclusion from the grade point average.)

If there have been any changes in course numbers or titles, the student must first obtain the approval of the chairperson of the department offering the course to be assured it is an identical course.

All grades for repeated courses are included in calculations for graduation honors. Once a degree has been awarded, repeated courses will not be accepted.

Student Classifications

Level

Freshman: a student who has satisfactorily completed fewer than 30 credit hours.

Sophomore: a student who has satisfactorily completed at least 30 credit hours and fewer than 60 credit hours.

Junior: a student who has satisfactorily completed at least 60 credit hours and fewer than 90 credit hours.

Senior: a student who has satisfactorily completed at least 90 credit hours.

Status

Regular: a student who is admitted as a degree candidate.

Temporary: a student who is admitted as non-degree seeking. See “Admissions” page for additional classifications.

Transient: a student who is admitted for one semester or summer and who is in good standing at his or her primary institution.

Post-baccalaureate: a student who has already earned a baccalaureate degree and is enrolled in undergraduate work for credit.

Suspension (from UALR)

Suspension occurs after the third successive semester of academic probation. Students who have finished their academic suspension are required to contact the Office of Records and Registration. These students will be placed on academic probation, limited to 13 credit hours per semester while on probation, and placed in a single semester probation status. This status requires that the student achieve a current term GPA of 2.0 or greater each term until the student’s cumulative GPA is 2.0 or higher.

Failure to achieve a term GPA of 2.0 or greater while in a single semester probationary status will result in academic suspension for two full semesters.

Students admitted with academic deficiencies will be limited to a maximum of 13 credit hours each semester. When such a student achieves a current term and cumulative GPA of 2.0 the limitation in hours is removed. If the student fails to obtain the required current term or cumulative GPA then the student is placed on academic probation. Such students will not be subject to academic suspension until the end of the third semester unless they were admitted on a single semester contract basis. A student suspended from UALR who earns academic credit from another accredited college or university during the period of suspension may receive credit for the course at UALR when readmitted if the course is transferable.

Suspension (from an institution other than UALR)

A student under first academic suspension from an accredited college or university may be admitted to UALR and allowed to enroll in probationary status. The student may enroll for a maximum of 7 hours and must attain a cumulative GPA of at least 2.0. Failure to attain the minimum 2.0 GPA in the first semester will result in suspension from UALR.

Transcripts

Transcripts are issued only at the request of the student and must include the student’s signature. Transcript requests should be made at least three working days prior to the desired date of issue. A $5 fee per transcript must be received before a transcript will be issued. No transcript or other evidence of attendance is issued to or for a student who owes money to UALR.

Transcripts that have been presented for admission or evaluation of credit become a part of the student’s permanent record and are not reissued. Transcripts from other institutions, if needed, must be sent to UALR directly from the original issuing institution.

Transferring Coursework

Only courses taken at regionally accredited institutions will transfer to UALR. Only credit hours earned at other institutions will transfer; grades and GPA do not transfer and are not calculated in the student’s GPA earned at UALR. However, all grades from all Universities are calculated for honors. See the Office of Transfer Student Services section for additional information.

Only courses with grades of “C” or greater will transfer automatically; however, a student may request to transfer as many as 6 credit hours with a grade of “D” from any accredited college or university. Credit for the hours will be accepted as transfer credit if the course meets requirements for transfer course credit and if a student would be allowed to earn a grade of “D” if the class were offered at UALR. A student may take advantage of this policy at any time prior to the awarding of an undergraduate degree.

A student may transfer as many as six credit hours with a grade of “D” from any accredited college or university. Credit for the hours will be accepted as transfer credit if the course meets requirements for transfer course credit and if a student would be allowed to earn a grade of “D” if the class were offered at UALR. A student may take advantage of this policy only once and at any time prior to the awarding of an undergraduate degree. If the student does not choose to transfer the maximum of six hours at that time, any remaining hours will not be accepted in transfer.

Designated University College advisers and one adviser per academic college will be authorized to approve the “D” transfer form. Once approved, the form will be sent to Records and Registration for processing.
Office of Admissions and Financial Aid

The Office of Admissions and Financial Aid may also be reached by phone at (501) 569-3127. Students who want to enroll at UALR should correspond with the Office of Admissions and Financial Aid as soon as possible because official determination of eligibility can be made only on receipt of official credentials.

After reviewing the appropriate credentials, an admissions counselor will determine if a student may be accepted or deferred admission. Non-degree seeking students will be classified as transient, temporary, non-degree seeking, or another classification. See “Other Admissions Categories.”

To ensure that all necessary requirements for admission have been fulfilled before registration, students are urged to submit all transcripts of previous academic work at least 30 days before registration. Transcripts from other institutions of higher education must be official and sent directly to UALR’s Office of Admissions and Financial Aid by the institution or hand delivered in a sealed envelope.

Foreign Transcripts: Applicants who have completed college or university-level courses in another country comparable to course credits in the U.S. must submit a course-by-course evaluation that gives U.S. equivalencies for each course and a conversion of the foreign grading scale and credit system into a 4.0 grading scale and semester credit system. For example, World Education Services and the American Association of Collegiate Registrars and Admissions Officers are two highly reputable non-profit organizations that provide evaluations of education credentials from all countries of the world.

Types of Students (Admission Categories)

Entering Freshmen

First-time entering freshmen are persons who have never been enrolled in an institution of higher education since graduating from high school or earning a GED. Such applicants must submit the following:

- An completed application for admission on BOSS (From the UALR homepage, click “Apply” located on the upper-lefthand corner.)
- An official high school transcript or GED scores
- An ACT, SAT, or COMPASS scores taken within the previous five years
- Proof of two MMR immunizations (required of all applicants born after January 1, 1957)

Transfer Students

Transfer students are those who have been enrolled previously in a higher institution of learning and have at least 12 transferable college credit hours and a grade point average of at least 2.00 on all previous college work to be granted regular admission. Such applicants must submit the following:

- An completed application for admission on BOSS (From the UALR homepage, click “Apply” located on the upper-lefthand corner.)
- An official transcript, a transcript sent directly from the college, from each college previously attended sent to

  UALR, Office of Admissions and Financial Aid
  2801 South University
  Little Rock, AR 72204

- Proof of two MMR immunizations (required of all applicants born after January 1, 1957)

Transfer credit from regionally accredited institutions will be evaluated only after a completed application for admission and final transcripts have been received. See “Transferring Coursework.” Transcripts from institutions not accredited by the regional accrediting associations will be handled at the discretion of the Director of Records and Registration. Students presenting such transcripts may be given provisional credit subject to the satisfactory completion of further work at UALR in subjects for which they are asking advanced standing and a satisfactory grade point average. However, such transcripts may be refused altogether.

Only official transcripts will be accepted for evaluation. They must be sent to UALR by the college and include complete records of the courses taken at all other institutions.

Provisional Admission

Transfer students who have not submitted all credentials necessary for admission by the application deadline may be admitted provisionally. In such cases, the student is admitted with the provision that s/he submit the missing admission credentials by the end of the term during which provisional admission was granted. The credentials will be evaluated upon receipt, and the student will be admitted and placed in the appropriate student status, or deferred admission.

If evaluation of the records shows that the student does not meet UALR’s minimum admission requirements, the student may be required to reduce the number of courses for which he or she is currently enrolled. For example, the student may be limited to no more than seven credit hours of enrollment. Such reductions may occur after the semester has already begun, in which case the student may be required to withdraw from one or more courses.

Admissions Deadlines and Criteria

Deadlines

Deadlines are strictly enforced. Entering freshmen must apply for admission and provide all required academic credentials one week prior to the start of classes. Freshmen are also required to be advised prior to the first day of classes.
All other applicants must apply for admission prior to the first day of classes.

Students unable to provide valid academic credentials prior to the start of classes may be admitted provisionally. See the section on provisional admission on the following page.

Students who have fewer than 12 acceptable transfer credits from another college or university must meet all of the admission requirements for entering freshmen. Students with 12 or more acceptable transfer credits must meet the admission requirements listed for transfer students.

Beginning September 1, 2009, all entering students will be charged an admission application fee (See the “Tuition and Fees” section).

Students granted provisional admissions who do not submit the missing credentials by the end of the term will not be permitted to enroll in subsequent terms until the admission requirements have been satisfied. Under no circumstances may students admitted provisionally be changed to non-degree seeking student status. Students on provisional status are not eligible to receive financial aid and are limited to 13 hours in the fall, spring, or summer semesters.

Criteria for Regular Admission

High School Core Curriculum

The college preparatory core curriculum for Arkansas high school students used in UALR’s freshman admission requirements may be changed by action of the Arkansas state legislature. UALR’s admission requirements apply to the college preparatory core curriculum in place when the student graduates from high school. High school students should work closely with their counselors to be sure to take the appropriate courses.

The transcripts of students who attend high school and apply to UALR will be examined for presence of the college preparatory core curriculum courses. The transcripts of students who attended high school outside of Arkansas will be examined for equivalent courses.

First-time Entering Freshmen

First-time entering freshmen applicants who present the following academic qualifications will be automatically admitted:

Successful completion of the high school college preparatory core in effect at the time of graduation from high school, plus one of the following:

- A cumulative high school grade-point average of 2.5.
- An ACT composite score of 21 or a combined verbal/math SAT I score of at least 990.

Students who were home schooled or completed a GED are automatically admitted if they have an ACT composite score of 21 or a combined verbal/math SAT I score of at least 990.

Students wishing an early admission decision using 6th semester transcripts will be admitted with the expectation of continued academic success in high school. Students admitted by early decision will be given preferential treatment for housing and registration.

The academic qualifications of all other applicants will be individually reviewed by the Admissions and Transfer of Credit Committee, with attention to those factors that indicate the applicant has the ability and motivation to earn the grades required for satisfactory academic progress and eventual graduation. Such factors include but are not limited to high school grades with particular focus on the college preparatory core courses and grades in them below C, the academic rigor of the high school courses, success in AP courses and International Baccalaureate courses, and standardized test scores. Based upon this review, the Committee may admit, defer or deny admission to the applicant. Any applicant whose admission is denied or deferred may, with the submission of additional information, request reconsideration.

Admission of International Students

See the “Office of International Services” section.

Other Admissions Categories

Donaghey Scholars Program Admission Information

The Donaghey Scholars Program is an honors program with a separate admissions process. This process uses test scores, written essays, recommendations, and personal interview to determine whether the student would benefit from admission to the program. Call (501) 569-3389 for more information.

Freshman Early Admission

Students who have completed the 8th, 9th, 10th, or 11th grade will be considered for admission provided they present a junior high or high school transcript indicating a cumulative grade point average of at least 3.00 and an ACT composite score of at least 21 (enhanced) or an SAT I total score of at least 990. The test must be taken on a national test date. Additionally, students who have not completed the 11th grade must achieve sub-scores on the ACT or SAT that meet the minimums necessary to qualify for college-level courses in order to be eligible for admission. The Admissions and Transfer of Credit Committee must approve the admission of these students. A personal interview with the Committee and/or additional testing may be required. Students under 18 years of age must also obtain their parent’s or guardian’s permission to enroll, permission of the high school counselor or principal, and approval of the instructor of the class they plan to attend at UALR.

All students seeking early admission must obtain an advisor through University College prior to enrolling at UALR. Students who qualify may take advantage of this program by:

- Enrollment in a summer term, then returning to junior high or high school
- Enrollment in a summer term or fall semester as a beginning freshman
- Enrollment in a limited number of college-level courses while completing junior high and/or high school

UALR is not responsible for guaranteeing high school diplomas under this arrangement; however, campus officials will cooperate with state or local school administrators concerning regulations for awarding a diploma to successful participants in this program. All college credit earned under this plan will apply toward a degree at UALR. Students in this category are not eligible for federal aid.

High School Concurrent Enrollment

Concurrent enrollment is permitted, subject to the approval of the appropriate academic advisors. Students are only eligible to receive financial aid funding from their primary institution.

Under state law UALR may concurrently admit qualified high school students to its academic programs as part-time students. To be eligible for high school concurrent enrollment, the applicant must meet one of the following requirements:

- Complete at least 50% of the state-recommended college preparatory courses with a minimum grade point average of 2.5
- Achieve a minimum overall high school grade point average of 3.0
- Achieve a minimum composite score of 21 on the ACT

Admission under these guidelines does not guarantee that a student may be enrolled in a particular course. Individual university departments may restrict enrollment into specific courses based on the following criteria:

- Acceptable score on a departmentally-approved placement or proficiency test
- Acceptable sub-scores on the ACT in the specific subject area
- Permission of the department chair or instructor

Prospective students for high school concurrent enrollment must submit a completed UALR undergraduate admission application.
Tuition and other fees for students attending UALR under high school concurrent enrollment are the same as for regular undergraduate students. Students in this category are not eligible for federal aid.

Home-Schooled or GED

Students who were home schooled or completed a GED are eligible for regular admission if they have an ACT of 21, SAT I of 990, or acceptable COMPASS score. Otherwise they may be admitted subject to credit hour limitations.

Non-degree Seeking Students

Non-degree seeking status does not require the submission of transcripts or ACT/SAT scores, but students must submit proof of immunization. It is available on a limited basis to students who wish to enroll in courses for personal enrichment or career development and do not plan to earn a certificate or degree at UALR.

Temporary students are not eligible for student financial aid or veteran’s benefits, nor are they eligible to enroll in RHET 1311 Composition I, MATH 1302 College Algebra, or 1315 College Math.

Nonresidents

UALR students are governed by the University of Arkansas Board of Trustees’ policy on student residency status. Those classified as nonresidents of Arkansas must pay higher tuition in addition to regular registration fees. Questions about residency status and requests for the written policy should be directed to the Office of Admissions and Financial Aid.

Post-baccalaureate Students

Students who already have a bachelor’s degree who wish to take additional undergraduate courses are required to submit an official transcript from the institution that granted the degree, proof of immunization, and an admission application to the Office of Admissions and Financial Aid. Post-baccalaureate students are not eligible for federal grants.

Previously Enrolled Students

Previously enrolled students who have attended another institution since attending UALR must submit an admission application and an official transcript mailed directly from the other institution(s) attended.

Readmission

Students who have not enrolled at UALR for two years or longer must reapply for admission. Such students who have attended other institutions in the interim should apply as a previously enrolled transfer student.

Students Over Age 60

Any Arkansas resident who is over 60 and has been admitted as a student at UALR shall receive a tuition waiver once proof of age has been provide to the Bursar’s Office on a space-available basis. Students qualifying for the waiver will be permitted to register only on the last day of the regular and late registration periods each academic term. If a course section has no available slots and additional students are attempting to register, students receiving the waiver may be removed from that course section. Exceptions may be granted to students who agree to forgo the waiver of tuition.

Verification of age will be required in the first semester a student qualifies for and accepts the waiver. If the student is degree seeking, transcripts are required from all institutions for transfer work. Students in this category are not eligible for federal aid.

Students Whose First Language is Not English

Any applicant for who English is not the first language must provide proof of English language proficiency and academic skill proficiency before starting classes at UALR. This includes refugees, immigrants, permanent residents, and citizens. English proficiency may be demonstrated in one of four ways by all students whose first language is not English, regardless of entry status:

- A score of at least 525 (paper-based) or 197 (computer-based) earned within the last two years on the Test of English as a Foreign Language (TOEFL) and a score of at least 4 points earned within the last two years on the Test of Written English (TWE).
- A score of 85 percent or above on the institutional English language proficiency test administered by the UALR Intensive English Language Program.
- Complete the Intensive English Language Program.
- An ACT score of at least 21 on both the English and Reading sections of the test.

- All other admission requirements must be met.

Transient Students

Students enrolled in an institution of higher education to which they intend to return who wish to take courses at UALR are admitted upon submission of a letter of good standing from the institution in which they are enrolled. Students who have recently graduated from high school and who have been fully admitted to an institution of higher education may take courses at UALR prior to attending the other institution upon submission of their letter of admission / acceptance. This status is limited to one semester or two summer terms. Further enrollment in this status is not permitted until the student has returned to his or her original institution, attended the institution to which s/he was admitted following high school graduation or has attended another institution before returning to UALR.
FINANCIAL AID & SCHOLARSHIPS

Office of Admissions and Financial Aid
Tammy Harrison, Director
Student Services Center, 2nd Floor
(501) 569-3127, (501) 569-8956 (fax), ualr.edu/admissions

The Office of Admissions and Financial Aid may also be reached by phone at (501) 569-3127. Students who want to enroll at UALR should correspond with the Office of Admissions and Financial Aid as soon as possible because official determination of eligibility can be made only on receipt of official credentials.

UALR offers aid from various sources including federal and state governments, colleges, and private organizations, to help students pay for their studies. Financial aid and Scholarships are meant to supplement a student’s ability to pay for college costs including tuition and fees, room and board, books, supplies, transportation, and other educational expenses.

To be eligible for any form of financial aid, a student must be accepted for admission with an eligible admission status and be enrolled at UALR as a degree-seeking student. Students who wish to apply for financial assistance must complete the Free Application for Federal Student Financial Aid (FAFSA) each year. Students may apply online at http://www.fafsa.ed.gov/. Applications are available in January of each year and students are encouraged to apply early.

Additional financial aid information can be obtained by calling (501) 569-3035 or by emailing: financialaid@ualr.edu.

Financial Aid

Financial aid available to UALR students includes grants, loans, scholarships, and employment. Aid packages can include a combination of different types of aid.

- **Grants:** financial aid that the recipient does not have to pay back.
- **Loans:** borrowed money that must be repaid with interest.
- **Scholarships:** gift aid with eligibility based on academic achievements, talents, skills, or merit.
- **Employment:** part-time on-campus and community service jobs that allow the student to earn money to help pay for school.

The majority of the financial aid available at UALR is provided by the federal government. The State of Arkansas also provides student aid, as do UALR and its contributors.

Federal Aid

The U.S. Department of Education provides funding for grants, student loans, scholarships, and employment. Most awards are based on financial need; some are based on merit. Federal student aid includes the Federal Pell Grant, Federal Stafford Loans, Federal Parent Loan for Undergraduate Students, Federal Supplemental Educational Opportunity Grants, Federal Work Study, and various scholarship awards. The Free Application for Federal Student Aid (FAFSA) is the application required for all federal financial aid and can be completed online at www.fafsa.ed.gov. The UALR school code is 001101.

State Aid

The Arkansas Department of Higher Education (ADHE) provides loans, grants, and scholarships to Arkansas residents enrolled at UALR. Award criteria include financial need, academic achievement, and/or study of specific subjects. For additional information about financial aid, call ADHE at (800) 54-STUDY, or in the Little Rock area, (501) 371-2050, or visit www.adhe.edu.

Private Aid

UALR offers scholarships and grants-in-aid provided by institutional and departmental funds, private foundations, corporations, and individuals. Eligibility requirements vary. Criteria for different scholarships include academic achievement, demonstrated talent or ability, a specific major or student classification, university or community involvement, and/or financial need. Some scholarships are available for part-time students.

The deadline to apply for UALR scholarships is March 1 for the coming academic year. Contact the Office of Development to obtain a complete list of UALR Private Scholarships. This includes the names and necessary qualifications for a number of scholarships. Students must also complete a current Free Application for Student Aid (FAFSA) to apply for UALR private scholarships. For Entering Freshman and Shelby Breedlove (two-year college graduate) Scholarships contact the Office of Admissions and Financial Aid. For specific academic or talent awards and scholarships, or contact the appropriate department. Areas in which scholarships are offered include athletics, chemistry, education, English, fine arts, geography, history, journalism, School of Law, marketing, military science, music, nursing, political science, psychology, rehabilitation of the blind, School of Social Work, speech, and theatre.
Veterans Benefits

The U.S. Department of Veterans Affairs provides basic programs for veterans and service members seeking assistance for education or training. Veterans and service members who entered the military from January 1, 1977 through June 30, 1985 may receive educational assistance under the Veterans Educational Assistance Program (VEAP) contributory plan. Individuals entering on active duty after June 30, 1985 may receive benefits under the Montgomery GI Bill contributory plan. Another educational entitlement program, referred to as the Montgomery GI Bill Selected Reserve (chapter 1606 and 1607 REAP), is available for members of the Selected Reserve, including the National Guard. Note: The Post 9/11 GI Bill is a new education benefit program for individuals who served on active duty on or after September 11, 2001. Please visit the GI Bill website or call 1-888-GIBILL-1 for additional information.

The noncontributory GI Bill ended on December 31, 1989. No benefits are payable for any training pursued on or after January 1, 1990 under this bill.

Monthly educational assistance benefits are based on the number of hours of enrollment. Full-time enrollment for an undergraduate student during fall and spring terms is 12 hours or more; three-quarter enrollment is 9 to 11 hours; half-time enrollment is 6 to 8 hours. For fewer than six hours only tuition and fees are reimbursed, except in the case of the MGIB for Selected Reserve/National Guard (Chapter 1606), these benefits are based on one-fourth of the full-time amount. Full-time enrollment for graduate students during fall and spring terms is 9 hours or more; three-quarters enrollment is 6 to 8 hours; half-time enrollment is 3 to 5 hours. Summer benefits for both graduate and undergraduate students are based on the number of hours enrolled and the number of weeks in the term.

There are Survivors/Dependents benefits for eligible persons. For further information contact the VA Regional Office at (800) 827-1000.

Other services available under the Veteran’s Affairs educational benefits include tutorial assistance, educational loans, and work-study.

Students classified as nondegree seeking or provisional may be eligible to receive Veteran’s Education benefits for one semester.

All eligible persons wishing to apply for Veteran’s Affairs educational benefits should contact the Office of Admissions and Financial Aid at (501) 569-3035.

Scholarships

UALR offers a number of full-tuition scholarships. Chancellor’s Leadership Corps Scholarships are awarded to freshmen who have demonstrated outstanding leadership capability in high school activities. Donaghey Scholars Program Scholarships are most often awarded to high school seniors with exceptional academic promise. See “Academic Policies & Requirements” on page 25 for specific academic or talent awards and scholarships, or contact the appropriate department.

CyberScholar scholarships are awarded to outstanding entering students in Computer Science, Information Science, and Systems Engineering. EAST Scholarships are available to selected students who participated in the EAST Program in high school.

Entering Freshman Scholarships are based on availability of funds and awarded to selected high school seniors who meet the February 1 deadline and have at least an ACT composite score of 24. A Freshman Award may also be available to students with an ACT composite score of at least 22. There are also scholarships available to students transferring from Arkansas public junior and community colleges. Applications and further information for these scholarships are available from the Office of Admissions and Financial Aid.

Private Scholarships and Awards

The Office of Development publishes a comprehensive list of private scholarships and awards available to all students. Additional information as well as applications can be obtained by contacting the Office of Development at (501) 569-3194.

Applying for Nationally Recognized Scholarships and Fellowships

As applications for the more prestigious scholarships often must be made while the student is still an undergraduate, students are encouraged to think ahead and start work on the application process at the earliest possible time.

Commencing research on scholarship possibilities during the freshman year is not too early. UALR offers considerable support and assistance to undergraduate students seeking scholarships for graduate study. The University has had recent winners in the Truman, Rhodes, and Mellon competitions, and has had many students win other prestigious national awards and scholarships. Students are encouraged to aim high in their scholarship goals, and take advantage of the assistance and advice that professors at UALR can offer.

Students should visit Fellowships webpage for further information on the Truman Scholarship, Rhodes Scholarship, Marshall Scholarship, James Madison Fellowship, National Security Education Fellowship (all of which fund graduate study); and the National Security Education Scholarship, Udall, and Goldwater Scholarships (which fund undergraduate study).

The website includes for each scholarship a statement of the purpose for which the sponsoring institution is underwriting the funding; an overview of the eligibility requirements; some remarks on important features of the written application; a description of the application process and summary of deadlines; and the person on campus to contact for further information.

Interested students should inquire early. Call (501) 569-8399, for general information or a referral to the appropriate scholarship advisor.
One of the most important decisions you face earlier in your journey at UALR is to pick a major (also called field of study or degree program). For some, this is easy, but for others it is a difficult task. You are not alone in making this decision. First of all, you should insist on help from your advisor in making your choice. Also, the Office of Career Counseling and Planning can assist you. It offers several tests to help match your interests and aptitudes with career choices. However, the following information is provided to get you started on the task of selecting a major.

Below, we have provided a chart that will help match your own assessment of your interests and skills with the programs we have available. Then, you may view all majors organized by UALR by college and department or by type of degree. These lists will give you an idea of where to go in the catalog or online to find more information.

<table>
<thead>
<tr>
<th>If you like…</th>
<th>+</th>
<th>If you are good at…</th>
<th>Look at the majors offered in the College of…</th>
</tr>
</thead>
<tbody>
<tr>
<td>• to examine the role that humans play in the development of the world</td>
<td>+</td>
<td>• writing effectively</td>
<td>ARTS, HUMANITIES, AND SOCIAL SCIENCES</td>
</tr>
<tr>
<td>• to look at the ways that art and culture have influenced history</td>
<td></td>
<td>• art (writing, theatre, dance, music, painting, drawing, design)</td>
<td></td>
</tr>
<tr>
<td>• language, art, history, literature, music, theatre, dance</td>
<td></td>
<td>• appreciating global and historical perspectives</td>
<td></td>
</tr>
<tr>
<td>• to study human behavior</td>
<td></td>
<td>• observing people</td>
<td></td>
</tr>
<tr>
<td>• to improve society</td>
<td></td>
<td>• being objective</td>
<td></td>
</tr>
<tr>
<td>• study/perform research</td>
<td></td>
<td>• taking an interest in people</td>
<td></td>
</tr>
<tr>
<td>• fundamentals of the business world</td>
<td>+</td>
<td>• analyzing real-world problems</td>
<td>BUSINESS</td>
</tr>
<tr>
<td>• working with numbers</td>
<td></td>
<td>• thinking outside of the box</td>
<td></td>
</tr>
<tr>
<td>• analyze information</td>
<td></td>
<td>• working well as part of a team</td>
<td></td>
</tr>
<tr>
<td>• to be the boss</td>
<td></td>
<td>• being self-motivated and disciplined</td>
<td></td>
</tr>
<tr>
<td>• working with children and/or young people</td>
<td></td>
<td>• organizing</td>
<td>EDUCATION</td>
</tr>
<tr>
<td>• to be enthusiastic and creative</td>
<td></td>
<td>• being patient</td>
<td></td>
</tr>
<tr>
<td>• to motivate</td>
<td></td>
<td>• communicating</td>
<td></td>
</tr>
<tr>
<td>• to engage in learning</td>
<td></td>
<td>• leading</td>
<td></td>
</tr>
<tr>
<td>• to solve practical problems</td>
<td>+</td>
<td>• being innovative</td>
<td>ENGINEERING AND INFORMATION TECHNOLOGY</td>
</tr>
<tr>
<td>• to think logically</td>
<td></td>
<td>• math and science</td>
<td></td>
</tr>
<tr>
<td>• to work with your hands</td>
<td></td>
<td>• working well as part of a team</td>
<td></td>
</tr>
<tr>
<td>• new technology</td>
<td></td>
<td>• coming up with solutions</td>
<td></td>
</tr>
<tr>
<td>• to follow the rules</td>
<td>+</td>
<td>• making decisions</td>
<td>PROFESSIONAL STUDIES</td>
</tr>
<tr>
<td>• to be fair-minded</td>
<td></td>
<td>• working well as part of a team</td>
<td></td>
</tr>
<tr>
<td>• to serve your community</td>
<td></td>
<td>• communicating</td>
<td></td>
</tr>
<tr>
<td>• to solve problems</td>
<td></td>
<td>• being aware of your surroundings</td>
<td></td>
</tr>
<tr>
<td>• to work in mass media</td>
<td></td>
<td>• public speaking</td>
<td></td>
</tr>
<tr>
<td>• public speaking</td>
<td></td>
<td>• working well independently</td>
<td></td>
</tr>
<tr>
<td>• to study math and science</td>
<td>+</td>
<td>• logic and organization</td>
<td>SCIENCE AND MATHEMATICS</td>
</tr>
<tr>
<td>• to solve problems</td>
<td></td>
<td>• following a specific process</td>
<td></td>
</tr>
<tr>
<td>• to know why</td>
<td></td>
<td>• observing things</td>
<td></td>
</tr>
<tr>
<td>• the world around you</td>
<td></td>
<td>• working well independently</td>
<td></td>
</tr>
<tr>
<td>• to take care of people</td>
<td></td>
<td>• maintaining a positive attitude</td>
<td></td>
</tr>
<tr>
<td>• how science relates to people</td>
<td></td>
<td>• personal health and wellness</td>
<td></td>
</tr>
<tr>
<td>• a hospital/health care setting</td>
<td></td>
<td>• communicating</td>
<td></td>
</tr>
<tr>
<td>• details</td>
<td></td>
<td>• working well as part of a team</td>
<td></td>
</tr>
</tbody>
</table>
Declaring a Major

When you apply for admission to UALR, you are asked to select a preferred program of study. This is not an official declaration of a major. Declaring a major is a separate process that you can initiate only after you are fully admitted to UALR.

You must request admission into the degree-granting program of your choice by completing a "change your major/minor" form online in BOSS. Your request must be approved by the department and college offering the program. Some programs have formal admission requirements. Upon acceptance, your records are sent to the major department where all future advisement will take place. If your request is denied, you will continue to be advised by the Office of Undergraduate Academic Advising. Some programs will approve the declaration of major even before formal program requirements are met and begin to advise you. Acceptance to the major in this "pre-admission" status may limit your ability to enroll in certain courses and/or limit other privileges that require full admission to the program.

Minors are declared using the same online process used to declare a major. To declare or change a major or minor follow the same procedure used to declare a major.

The request to declare or change a major or minor is completed by going to the secure portion of BOSS and logging in. Once you log in, select “Student Services,” then “Student Request Menu,” and finally “Change major and/or minor” to complete the online request.

Degree Plan

After you have declared a major and minor (if a minor is required by your major), your advisor will draw up a degree plan.

The plan indicates, as of a given date, the hours completed, including your agreement to:

1. Fulfill all degree program contract requirements at UALR
2. Enroll continuously (cannot skip enrollment in a semester for any reason)
3. Accept any available course section that can be accommodated
4. Have your class schedule approved by your official ACT 1014 departmental advisor and register for classes each semester before the first day of classes
5. Enroll continuously (cannot skip enrollment in a semester for any reason) and complete at least 30-36 semester credit hours of approved course work each academic year as outlined in your degree plan contract.
6. Never change the major, minor, concentrations, or emphasis of your degree program after your ACT 1014 contract is signed;
7. Meet all program requirements semester to semester as detailed in your degree plan and never be placed on academic probation or suspension for any semester of enrollment;
8. Enroll in the fall semester as a first-time entering freshman
9. Submit all required admission credentials so that they are received at UALR no later than July 15
10. Sign a degree program contract in consultation with assigned advisor(s) no later than August 1. Register for first fall semester no later than August 8.
11. To remain in good standing a GAP student is required to:
   • Enroll at UALR in each fall and spring semester for four consecutive years.
   • Fulfill all degree program contract requirements at UALR without dropping courses specified on the degree program contract.

Eligible Degree Programs:

Please note that ACT 1014 is only one of many paths to successful completion of a college degree. Choosing to waive participation in ACT 1014 will not affect your chance for a successful college career.

When choosing to participate in the ACT 1014 guaranteed 8-semester degree completion program, a student accepts responsibility for monitoring his or her progress toward a degree and for making choices, in consultation with an ACT 1014 compliance advisor, that will lead to graduation in 8 semesters.

Failure to meet any of these conditions will require that a student waive participation in the ACT 1014 program. If you know that you will not or cannot fulfill these eligibility requirements, you must waive participation in the ACT 1014 program now, or you will be required to waive participation at the time of your first advisement session. Once your ACT 1014 option is waived, this one-time decision is final.

Please be advised that your continued participation in the ACT 1014 program requires many responsibilities on your part, including your agreement to:

1. Follow exactly the 8-semester degree plan for the intended major and minor degree program as outlined in the degree program contract, including taking the number of hours (full-time or more) specified by the contract;
2. Never change the major, minor, concentrations, or emphasis of your degree program after your ACT 1014 contract is signed;
3. Meet all program requirements semester to semester as detailed in your degree plan and never be placed on academic probation or suspension for any semester of enrollment;
4. Have your class schedule approved by your official ACT 1014 departmental advisor and register for classes each semester during the early registration period;
5. Accept any available course section that can be accommodated in your class schedule, or notify your official ACT 1014 advisor in writing that a contract variation or adjustment will be required before the first day of classes;
6. Enroll continuously (cannot skip enrollment in a semester for any reason) and complete at least 30-36 semester credit hours of approved course work each academic year as outlined in your degree plan contract.

Other events based on your actions that may void the guarantee include the dropping or failure of a course, withdrawal (for any reason) from the university, non-payment of tuition or fees, and disciplinary actions. Failure to meet any of the above conditions means that a student has voided his or her ACT 1014 program agreement, and will be excluded from further participation in the ACT 1014 degree guarantee. If you know that you will not or cannot fulfill these program responsibilities, you may waive participation in the ACT 1014 program now, or you will be required to void further participation at the time of the first advisement session after a responsibility has been voided. Once your ACT 1014 option is voided, the decision is final.

For more information about ACT 1014, visit:
http://ualr.edu/advisingcentral/index.php/home/gap/

---

1 Students who have taken UALR courses while enrolled simultaneously in high school courses or who have taken Advanced Placement (AP) courses for college credit (and will have submitted AP test scores to UALR for credit by July 15) may enroll as first-time freshman and be eligible to accept or waive participation in ACT 1014.
CHECKLIST FOR GETTING STARTED

The following checklist indicates the steps that students new to UALR must take to begin their journey at UALR. The sections of this catalog following the checklist are arranged to provide information roughly in the order you will need it for these steps and then to continue your journey.

APPLY for Admission

The Admission Application is entirely online at http://boss.ualr.edu. This link is at the top of every web page on the UALR website. Follow the instructions on each page and fill out all of the information.

SUBMIT Required Documents

Submit Official Copies of the following to complete your application:

1. Immunization Records
2. Transcripts from ALL postsecondary institutions you have attended and military training
3. Final High School transcripts & ACT/SAT/Compass scores (First-Time Entering Freshman Transfers ONLY)

International Students. Students should first contact the Office of International Services at (501) 683-7566. The Office verifies and posts international transfer credits to the student’s file, which is then forwarded to the Office of Transfer Student Services where evaluation of transfer credits towards core curriculum requirements in the student’s academic major will be applied.

Military Students. Students should submit military transcripts, in addition to all other college transcripts, to the Office of Admissions. Once notified of the receipt of military transcript, our Military Ombudsman, Kathy Oliverio, will then evaluate the transcript for possible awarding of academic credit. Call (501) 569-3204 or email kmoliverio@ualr.edu for additional information.

NOTE: Although you may be provisionally admitted for admission, until your admission requirements are complete, UALR cannot accurately evaluate your transfer hours, advise you, or guarantee registration in degree appropriate courses. Also, to receive financial aid your (a) admission requirements and (b) financial aid requirements must be complete.

APPLY for Scholarships & Financial Aid

Information concerning scholarships and financial aid is covered in depth starting in the following pages. You may also visit the Office of Admissions and Financial Aid website at ualr.edu/admissions. Federal Financial Aid. If you have not already done so, apply for federal aid online at https://www.fafsa.ed.gov. You must fill out the FAFSA form before applying for any state scholarships.

State Scholarships. Click on the “Universal” scholarship link at https://www.ark.org/adhe_financialaid/Login.aspx. This will calculate what state scholarships and financial aid you are entitled to receive.

Transfer Scholarships. The Shelby Breedlove Transfer Scholarship is for students who will have completed at least 60 hours at an accredited Arkansas community college with a cumulative GPA of 3.25 or higher. Applications must be received by February 1 for fall semester transfers (November 1 for spring transfers).

UALR Private Scholarships. The deadline for private scholarships is March 1. For additional information about UALR’s private scholarship listing, go to ualr.edu/scholarships/private.

GI Bill. Active duty or military veterans who are entitled to the GI Bill should contact our Veterans Affairs Office at (501) 569-8171 or email vavets@ualr.edu.

FOLLOW UP on Your Application

Once your admissions application is received, it will be reviewed. Within 3-5 business days, you should receive a letter in the mail identifying items you need to submit to complete your application. Your application must be complete before you will be fully admitted to the University and before you can receive financial aid.

ATTEND New Student Orientation

Attendance at New Student Orientation is mandatory. You must have a new student ID (Trojan or T-number) and PIN in order to register for orientation. If you are not sure of your ID or PIN, email the Office of Admissions & Financial Aid at admissions@ualr.edu or call (501) 569-3127. For more information about orientation, contact the Office of Campus Life at (501) 569-3308 or visit http://ualr.edu/orientation.

GET Advised

Once your admissions application is approved, and you are fully admitted to the University, you need to be advised as to which classes you need to take.

Declared Majors. Contact your appropriate department to get advised. The college/department is dictated by your major. See the list of “Degrees by Major” or online at ualr.edu/academics.

IF Undeclared: Contact Academic Advising at (501) 569-3386. If you need reading or composition developmental coursework, contact the Academic Success Center at (501) 569-3280. Pulaski Technical College students can contact the PTC Campus Advising Center, Room 318 or call (501) 812-2821.

REGISTER for Classes

Once advised, go to BOSS and register for classes
Advising is mandatory for all students each semester and must be done well in advance of published registration dates. Provisional and temporary students are not eligible for academic advisement until all required admission credentials are submitted and evaluated by the Office of Records and Registration. After this evaluation has occurred, academic advising will be required each semester. Where students are advised depends on their status:

- Entering or a transfer freshman who need developmental reading/composition, must be advised in the Academic Success Center.
- Undeclared majors are advised in the Office of Undergraduate Academic Advising.
- Declared majors are advised in the department offering the major.

### Academic Success Center

**Kimberly Bright, Director**  

The Academic Success Center (ASC) offers enriching services designed to foster holistic success of students. The ASC is located in Speech Building 101, and is open from 8 a.m. to 5 p.m. Monday through Friday, with staff member(s) available for evening appointments. For more information call (501) 569-3280. The Collegiate Success Program (CSP) provides personal attention and high-quality instruction to freshmen and sophomore students through an array of services. A two-semester, structured learning experience is offered to entering and transfer freshmen needing to complete developmental Reading and Composition coursework. This coursework is offered through learning communities with small class enrollment. Students are required to meet with an academic advisor, sign an enrollment agreement, and attend workshops and community building activities.

### Office of Undergraduate Academic Advising

**Thea Hoeft, Division Chief**  
**Student Services Center, Room 320 (501) 569-3386, http://ualr.edu/advising/**

The primary function of this office is to provide academic advising for new and continuing students who have not declared a major. Students who are seeking admission to degree programs offered at other institutions and who are taking prerequisite course work at UALR are also advised. A complete review of the student’s academic record is provided each term; required test scores and course placement, transfer work, high school concurrent, AP and IB, and the core curriculum requirements are all considered.

The office maintains advisement records for all undergraduate students who have not declared their major. The degree plan for the associate of arts in general studies is developed and maintained in this office for students who are seeking this degree. Personalized advising conversations are intentional and assist students in learning to assess their competencies, discover their passions and clarify their academic path that leads to graduation.

Academic advising processes assist in clarifying and reinforcing optimum course sequences to plan degree completion on a full-time or part-time basis. Guidance is based on University policy, state and federal laws, major and minor program requirements and individual choices. Advising via e-mail is available.

### First-Year Colloquium

Leaving high school behind to attend college at UALR is an exciting transition. To assist students in that transition, all full-time freshmen entering a college or university for the first time and transfer students with less than 12 hours of credit are required to take a First Year Colloquium. Several versions of the colloquium are available, but all carry full academic credit and are designed to help put freshmen on a path to success at UALR. Planning for graduation begins on day one!

All versions of the First Year Colloquium are small in size and require students to learn about and use campus and off-campus resources (libraries, career planning and counseling services, tutoring, etc.) and strategies for goal-setting and time management. Some versions include a service-learning project that applies academic learning to real-life situations.

Which course to take? Some specialized first-year colloquiums are aimed at students intending to major in particular subject areas. The table below indicates the appropriate colloquium for such students. Students intending to major in a subject area that is not singled out in the table should register for PEAW 1300, the first course in the table. All students should consult with their academic advisor before registering for a first year colloquium. A few colloquia are limited to students in other targeted special programs and those receiving particular scholarships. Such students will be advised through those programs and scholarships as to the appropriate colloquium for which they should register. Intended for Declared Major Course

<table>
<thead>
<tr>
<th>INTENDED FOR DECLARED MAJOR</th>
<th>COURSE NUMBER</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>All majors</td>
<td>PEAW 1300</td>
<td>The First Year Experience</td>
</tr>
<tr>
<td>Business (Economics, marketing, finance, or management)</td>
<td>BSAD 1300</td>
<td>Discovering Business</td>
</tr>
<tr>
<td>Chancellor’s Leadership Corps</td>
<td>PEAW 1124</td>
<td>Practicum: Leadership Training</td>
</tr>
<tr>
<td>Computer Science</td>
<td>PEAW 1124</td>
<td>Practicum: Leadership Training</td>
</tr>
<tr>
<td>Construction Management and Construction Engineering</td>
<td>CNMG 1101</td>
<td>First Year Colloquium in Construction</td>
</tr>
<tr>
<td>Donaghey Scholars</td>
<td>SCHL 1101</td>
<td>Scholars Colloquium</td>
</tr>
<tr>
<td>Education (Teacher Ed-early &amp; middle childhood and secondary ed)</td>
<td>TCED 1100</td>
<td>Intro Teaching/Learning</td>
</tr>
<tr>
<td>Engineering Technology/Computer</td>
<td>ECET 1302</td>
<td>Freshman Yr Experience Tech/ Computer</td>
</tr>
<tr>
<td>History</td>
<td>HIST 1314</td>
<td>First-Year Colloquium</td>
</tr>
<tr>
<td>Information Science</td>
<td>IFSC 1305</td>
<td>Freshman Experience</td>
</tr>
<tr>
<td>Systems Engineering</td>
<td>SYEN 1310</td>
<td>Intro to Systems Engineering</td>
</tr>
<tr>
<td>University Science Scholars</td>
<td>BIOL/CHEM/ERSC 1305</td>
<td>University Science Scholars</td>
</tr>
</tbody>
</table>
## Undergraduate Programs

**Associate of Arts (A.A.)**
- General Education

**Associate of Science (A.S.)**
- American Sign Language
- Computer Programming
- Engineering Technology (Electrical)
- Engineering Technology (Mechanical)
- Law Enforcement
- Nursing

**Bachelor of Arts (B.A.)**
- Anthropology
- Art (Emphasis in History or Studio)
- Chemistry
- Criminal Justice
- English
- History
- International Studies
- Interpretation: American Sign Language/English
- Liberal Arts
- Mass Communication
- Mathematics
- Music
- Philosophy
- Physics
- Political Science
- Professional and Technical Writing
- Psychology
- Sociology
- Speech Communication
- Theatre Arts
- World Languages

**Bachelor of Arts Technology (B.A.T.)**
- Applied Technology

**Bachelor of Business Administration (B.B.A.)**
- Economics
- Finance (Emphasis in General Finance, Real Estate, and Insurance)
- International Business
- Management
- Management Information Systems
- Marketing

**Bachelor of Fine Arts (B.F.A.)**
- Art
- Dance Performance

**Bachelor of Science (B.S.)**
- Accounting
- Architectural & Construction Engineering
- Biology
- Chemistry
- Civil and Construction Engineering
- Computer Science
- Construction Management
- E-Commerce
- Electronics and Computer Engineering (Technology)
- Engineering Technology (Mechanical)
- Environmental Health Sciences
- Geology
- Health, Human Performance and Sport Management
- Information Science
- Mathematics
- Physics

**Bachelor of Science in Education (B.S.Ed.)**
- Early Childhood Education
- Middle Childhood Education

**Bachelor of Science in Nursing (B.S.N.) (Nursing Completion Program)**

**Bachelor of Social Work (B.S.W.)**

**Certificate Programs**
- Electronic Journalism
- Media Production and Design
- Service Learning Scholars
- Shepherd Program in Poverty Studies Certificate

## Graduate Programs

**Graduate Certificates**
- Accountancy
- Applied Statistics
- Conflict Mediation
- Geospatial Technology
- Gerontology
- Gifted Education
- Information Quality
- Information Systems Leadership
- Literacy Intervention Specialist
- Management
- Management Information Systems
- Marriage and Family Therapy
- Nonprofit Management
- Orientation and Mobility of the Blind
- Public Service
- Reading/Literacy Coach
- Rehabilitation Counseling
- Secondary Education
- Strategic Communication
- Systems Engineering
- Taxation
- Teaching Advanced Placement
- Technology Innovation

**Master of Accountancy (M.Acc.)**

**Master of Arts (M.A.)**
- Applied Communicative Studies
- Art
- Chemistry
- Criminal Justice
- Gerontology
- Higher Education
- Journalism
- Liberal Studies
- Professional and Technical Writing
- Public History
- Rehabilitation Counseling
- Rehabilitation of the Blind
- Second Languages

**Master of Business Administration (M.B.A.)**
- Adult Education
- Counselor Education
- Curriculum & Instruction
- Early Childhood Education
- Educational Administration
- Learning Systems Technology
- Middle Childhood Education
- Reading
- Secondary Education
- Special Education
- Teaching Gifted and Talented

**Master of Public Administration (M.P.A.)**

**Master of Public Service (M.P.S.)**

**Master of Science (M.S.)**
- Applied Sciences
- Bioinformatics
- Biology
- Chemistry
- Computer and Information Sciences
- Construction Management
- Criminal Justice
- Health, Human Performance and Sport Management
- Information Quality
- Integrated Sciences and Mathematics
- Management Information Systems
- Mathematical Sciences
- Speech Pathology (with UAMS)
- Systems Engineering
- Taxation

**Master of Social Work (M.S.W.)**

**Education Specialist (Ed.S.)**
- Educational Administration
- Reading

**Juris Doctor in Law (J.D.)**

**Juris Doctor in Law/Public Service (J.D. – with Clinton School)**

**Doctor of Audiology (Au.D. – with UAMS)**

**Doctor of Education (Ed.D.)**
- Educational Administration
- Higher Education

**Doctor of Philosophy (Ph.D.)**
- Applied Sciences
- Bioinformatics
- Communication Sciences and Disorders (with UAMS and UCA consortium)
- Criminal Justice
- Engineering and Science Systems
- Integrated Computing
-Reading
Degree Requirements

Baccalaureate Degree Requirements
To receive a baccalaureate degree, a student must complete the following requirements:

[NOTE: Academic majors and colleges may specify additional and/or more restrictive requirements.]

- A minimum of 120 hours of which 30 hours must be in residence and 45 must be upper-level (3000 level or above). A baccalaureate degree program may require more than 120 semester hours of college credit if prior approval has been granted by the Board of Trustees or it is a requirement of an independent licensing or accrediting body.

These required hours must include:

- A minimum of a 2.0 cumulative grade point on all work attempted at the University.
- A minimum of a 2.0 cumulative grade point on all work attempted in the academic major and a minimum of a 2.0 cumulative grade point on all work attempted in the academic minor.
- A core curriculum which must include a 3 hour course in U. S. history or U. S. government and a 3 hour course in College Algebra, College Math or higher level math course.
- A major and a minor, a combined major-minor, a double major or a major and an associate degree transferred from another institution in a program not offered at UALR.
- Completion of the appropriate second language requirement for students seeking a B.A., B.S.E., or B.S.W. degree.

Associate Degree Requirements
Except for certain programs as specified elsewhere in this catalog, all students receiving the associate degree (the AA or AS) must successfully complete 60 hours including the following 15 hours of core courses:

- RHET 1311 Composition I
- RHET 1312 Composition II
- SPCH 1300 Speech Communication
- HIST 2311 U.S. History to 1877, or HIST 2312 U.S. History since 1877, or POLS 1310 American National Government
- MATH 1321 Quantitative and Math Reasoning or MATH 1302 College Algebra

Graduation with an associate degree requires a C average (2.0 cumulative grade point average) on all work attempted at the University; completion of at least 20 hours above the freshman level, unless specified otherwise in the program; and completion of the final 15 hours (excluding credit by examination) in residence. Hours earned as credit by examination are counted as hours toward graduation but are not counted as hours in residence. See “Credit by Examination.”

Courses completed for an associate degree at UALR will be counted toward the appropriate requirements for the baccalaureate degree.

Second Associate Degree
An associate degree may be conferred as a second degree when the first degree is either a baccalaureate or another associate degree, subject to these provisions:

1. The second associate degree must be in a different discipline from the first degree.
2. Students must complete at least 15 credit hours in residence (excluding credit by examination) beyond their first degree.
3. Only credit earned at UALR after completing the first degree will normally apply toward the second degree. However, students in their final semester of studies toward the first degree may complete the course load for that semester with courses applicable to the second degree. Students must file a written statement of their intent to seek a second degree with the Office of Records and Registration at the time of registration.
4. A major must be completed. Courses completed within the previous degree that satisfy requirements for the second major may be accepted as satisfying course requirements, but not as hours toward the second degree. These hours do not count as part of the 30, except as specified in Item 3 above.
5. The core curriculum component in the second associate degree is not required. However, if not taken as a part of another baccalaureate degree, a course in United States history or government (HIST 2311, HIST 2312, or POLS 1310) must be completed. See “U.S. Traditions: United States History or Government Requirement.”
Second Baccalaureate Degree

A second baccalaureate degree may be conferred subject to these provisions:

1. Students must complete at least 30 credit hours in residence (excluding Credit by Examination) beyond their first degree.
2. Only credits earned at UALR after completion of the first degree will normally apply toward the second degree. However, a student in the final semester of studies toward the first degree may complete the course load for that semester with courses applicable to the second degree provided the student files a written statement of intent with the Office of Records and Registration at the time of registration.
3. A major must be completed. Courses completed within the previous degree that satisfy requirements for the second major may be accepted as satisfying course requirements, but not as hours toward the second degree. These hours do not count as part of the 30, except as specified in Item 2 above.
4. A minor is not required.
5. If not taken as a part of another baccalaureate degree, a course in United States history or government (HIST 2311, HIST 2312, or POLS 1310) must be completed, see “U.S. Traditions: United States History or Government Requirement.”

There is no second language proficiency requirement for students seeking second baccalaureate degrees.

Graduation Regulations

These provisions apply to baccalaureate degrees:* • Hours earned as credit by examination are counted as hours toward graduation but are not counted as hours in residence. See “Credit by Examination.” • Two courses, up to eight hours, may count toward both major(s) and minor(s) requirements. • A student in the process of completing more than one major or minor may have one calendar year following graduation with one major to complete the additional declared major(s)/minor(s) if: • The student has a valid degree plan on file which specifies requirements for more than one major or minor • The student completes an application for graduation which indicates that a total of seven or fewer hours remain to complete the additional major(s)/minor(s) • A student may elect to graduate under the provisions of the UALR Undergraduate Catalog in effect during any semester in residence at UALR before qualifying for a degree. Students who interrupt their enrollment at UALR for more than five consecutive calendar years must use the catalog current at the time of readmission or later. A student transferring to UALR from regionally accredited four-year institutions, community colleges, or junior colleges with 13 or more hours of accepted credit may graduate under the provisions of a UALR Undergraduate Catalog in effect during any semester of the previous five years in which they were enrolled at the other institution. Note: At no time may a student follow the provisions of a UALR Undergraduate Catalog that is more than five years old at the time of the student’s entry into UALR. • A student enrolled at UALR who intends to enroll concurrently or as a transient student at another accredited institution should obtain advance approval and then complete a Special Exception Form to assure that courses taken at other institutions will be applied toward UALR graduation requirements.

Commencement Participation

A senior may participate in commencement exercises prior to the completion of all degree requirements if the student has:
• a cumulative 2.0 grade point on all work attempted at UALR • a cumulative 2.0 grade point in the academic major and in the academic minor • no more than nine hours remaining to complete degree requirements • submitted a graduation application following prescribed procedures. See “Graduation.” *Academic majors and colleges may specify more restrictive requirements which supersede these regulations and are detailed in each department section of this catalog.

U.S. Traditions: United States History or Government Requirement

Arkansas law requires that all students who receive an associate or baccalaureate degree successfully complete a course in U.S. history or U.S. government.

This requirement can be met by HIST 2311 U.S. History to 1877, HIST 2312 U.S. History Since 1877, or POLS 1310 American National Government. Other United States history or government courses may also meet this requirement. However, the student should check with an advisor in the Department of History or the Department of Political Science before choosing to meet the requirement with any other course.

Second Language Requirement

B.A. Students

Students seeking a B.A. degree in any of the following majors are required to complete a 2000-level second language course or demonstrate equivalent proficiency as measured by a competency test. Languages which may be used to meet the second language requirement include French, German, Spanish, American Sign Language, and other languages as approved and arranged through the Department of International and Second Language Studies. Students may meet the requirement in one of the following ways:
1. The student has a valid degree plan on file which specifies requirements for more than one major or minor.
2. The student completes an application for graduation which indicates that a total of seven or fewer hours remain to complete the additional major(s)/minor(s).

B.S.E. Students

Students seeking a B.S.E. in Early Childhood Education are required to complete 3 hours of a second language and 3 hours of English as a Second Language.

Students seeking a B.S.E. in Middle Childhood Education are required to complete 6 hours of a second language or English as a Second Language in any combination or level. Students may meet the requirement in one of the following ways:
1. Successfully completing a second language course at UALR and satisfying all the prerequisites for that course
2. Transferring the equivalent courses from another institution of higher education
3. Demonstrating equivalent proficiency on a language test.

B.S.W. Students

Students seeking a B.S.W. degree are required to complete the elementary I and II levels of a second language sequence of courses (Foreign Language 1311 and 1312 or Interpretation 1320 and 1321) or demonstrate equivalent proficiency as measured by a competency test. Languages which may be used to meet the second language requirement include French, German, Spanish, and American Sign Language. Students may meet the requirement in one of the following ways:
1. Successfully completing six hours of an approved sequence of second language courses at UALR
2. Transferring the equivalent courses from another institution of higher education to UALR
3. Demonstrating equivalent proficiency on a language test.

Demonstrating Proficiency in a Second Language to Satisfy the Requirements for B.A., B.S.E, and B.S.W Degrees

Students who wish to meet second language requirements by demonstrating proficiency should take either the CAPE test or the American Sign Language Proficiency test before enrolling in UALR language courses. These tests are also used to determine placement in the appropriate language courses.

The following students do not need to take the test before enrolling in a language course:

- Students who have already completed UALR second language courses
- Students who have completed university-level courses for transfer credit in French, German, Spanish, or ASL*
- Students who have never studied French, German, Spanish, or ASL before and are enrolling in first semester courses in these languages.

*Courses in signing systems other than ASL such as manually coded English and conversational sign language will normally not apply. Contact the Department of Counseling, Adult, and Rehabilitation Education (CARE) for more information.

Second language course waivers may be granted to students with verified disabilities, after examination by a special committee. Students seeking such a waiver should contact the Associate Vice Chancellor for Academic Affairs at (501) 569-3204.

French, German, or Spanish

Students must take a computerized, multiple-choice test (the F-CAPE, the G-CAPE, or the S-CAPE) coordinated by the Office of Testing Services and Student Life Research.

To demonstrate proficiency in a language other than French, German, or Spanish, students should contact the Department of International and Second Language Studies, Stabler Hall 201 at (501) 569-3272.

American Sign Language (ASL)

Students must take a two-part test administered by the Department of Counseling, Adult, and Rehabilitation Education’s (CARE) interpreter education program. The first part of the test is a written multiple choice exam. The second part is an interview with program faculty conducted in American Sign Language. Results of both the written test and interview are shared with the student at the end of the interview. Students should contact the Department of CARE for an appointment.

English as a Second Language

Students whose first language is not English may use the following core courses (9 credit hours) to satisfy the second language requirement:

- RHET 1311 Composition I,
- RHET 1312 Composition II,
- ENGL 2337 World Literature
- or ENGL 2338 World Literature Themes
- or PHIL 2320 Ethics and Society

Post-Baccalaureate Students

All students who have received a bachelor’s degree from a regionally accredited institution, including UALR graduates, and who wish to pursue an additional undergraduate degree or certificate at UALR are required to apply for undergraduate admission to the university by the published deadline. After all admission requirements have been met, these students will be admitted into Post-baccalaureate status. This policy also applies to International students who received an equivalent degree (as determined by UALR) from an institution outside the U.S. and who wish to pursue a 2nd undergraduate degree at UALR.
**General Education Requirement (UALR Core Curriculum)**

**Basic Competencies**

The purpose of general studies or the core curriculum is to establish a foundation for the undergraduate academic experience and to ensure that students develop fundamental skills and a lifelong commitment and ability to learn. All courses stress active learning. In addition, all courses are aimed at one or more of these basic competencies.

- **Aesthetic Experience**: This competency includes knowledge about different art forms and their history; an understanding of how creative processes compare among art forms; and the ability to describe and analyze artistic works.
- **Critical Thinking**: Critical thinking requires the ability to analyze data, synthesize information, make decisions, and systematically and imaginatively solve problems. All core courses stress critical thinking, providing practice in the techniques of inquiry, logical reasoning, and critical analysis.
- **Ethical and Moral Consciousness**: Competency in this area involves the ability to recognize ethical and moral issues that may arise from ethical and moral works.
- **Historical Consciousness**: Historical consciousness requires the knowledge of the main stages of human cultural development, along with the ability to relate one’s historical heritage to that of other cultures, past and present. This competency involves understanding historical events, whether social, economic, or political, and then examining the relationships among theater-in-the-round such as change, continuity, and causation.
- **Information Technology**: Competency requires using contemporary technologies to communicate effectively; to locate, manage, and analyze information; to critically evaluate information obtained through these technologies; to comprehend basic information technology concepts in order to understand and quickly assimilate new technologies as they evolve; and to have an understanding of and respect for the ethical and legal aspects of the use of information technology.
- **International Awareness**: The international awareness competency involves the ability to examine one’s own culture, society, and nationality from perspectives acquired through understanding other cultures and nations, including their languages, literature, art, history, and geography.
- **Mathematics**: Competency in mathematics includes an understanding of the concepts, the methodology, and the application of probability and statistics; the ability to use and interpret functions and graphs to express relationships; an appreciation of the importance of numerical information; and a recognition of both the role and the limitations of mathematics in all areas.
- **Philosophy and Methods of Science**: Competency in the philosophy and methods of science involves understanding the strengths and limitations of science, including how scientists learn about the world through observation and experiment, through modeling and interpretation, and through the skeptical scrutiny of the work of other experts in the field. This competency includes the following: an awareness of relationships between science and society; the ability to use scientific reasoning to evaluate conflicting statements in order to arrive at informed opinions on contemporary issues; an appreciation of how experiencing the universe scientifically differs from experiencing it in other ways; and knowledge of the questions that science neither asks nor answers.
- **Social and Cultural Awareness**: Social and cultural awareness requires viewing human beings as organisms functioning within a set of global, interconnected systems, including nationality, ethnicity, race, gender, class, law, religion, and communication—that influence and are influenced by changing individuals. This competency includes knowledge about how persons develop and grow; awareness of how social and cultural systems influence values, thought, and behavior; and appreciation for the interactions, conflicts, and communication among systems.
- **Verbal Literacy**: Verbal literacy includes four skills: writing, reading, speaking, and listening and the ability to use language to learn and participate in the discourse and decision-making of academic, personal, professional, and public life. Competency in written literacy involves the ability to read and write clearly and thoughtfully; to understand different writing and reading processes; and to use these processes to advantage when writing and reading about experiences and ideas. Competency in oral literacy involves public speaking and interpersonal and small group communication. All core courses address this competency.

**General Education Requirement (University Core Curriculum)**

A student seeking most baccalaureate degrees must complete a total of 44 hours in core courses. Listed below are the required categories, the number of hours required in each category, and the specific courses that will fulfill that requirement. Students majoring in a program of study offered through the Donaghey College of Engineering and Information Technology, as well as select programs within the College of Science and Mathematics, follow a different core.

**English /Communications (9 credit hours)**

Written and Oral Literacy (All three of the following courses):

**RHET 1311 Composition I**

Prerequisite: A minimum ACT English score of 19, a minimum SAT I verbal score of 450, RHET 0310, or RHET 0321. Practice in writing, with an emphasis on personal, expressive writing, as well as transactional writing. Students will focus on organizing and revising ideas and writing well organized, thoroughly developed papers that achieve the writer’s purpose, meet the readers’ needs, and develop the writer’s voice. Final course grades are A, B, C, or NC. Students must complete this course with a grade of C or greater to take RHET 1312. Three credit hours.

**RHET 1312 Composition II**

Prerequisite: RHET 1311 with a C or greater or equivalent. Those students required by state law to enroll in READ 0310 must successfully complete that course before enrolling in RHET 1312. Practice in writing, with an emphasis on academic forms. Students will focus on analysis, argumentation, research, and documentation writing. Final course grades are A, B, C, or NC. Three credit hours.
Math (3 credit hours)

Math and Statistics

(One of the following courses-3 credit hours):

MATH 1302 College Algebra
Prerequisite: A grade of C or greater in Math 0301 – Intermediate Algebra, an equivalent transfer course or a suitable score on a mathematics placement test. Study of functions, including but not limited to, absolute value, quadratic, polynomial, rational, logarithmic, and exponential; systems of equations; and matrices. Three hours lecture. Three credit hours.

Note: FALL 2012 is the last semester MATH 1315 College Mathematics will be offered. Beginning SPRING 2013, all non-STEM majors will have the option to take MATH 1321 Quantitative and Mathematical Reasoning, instead of MATH 1315.

MATH 1315 College Mathematics
Prerequisite: A grade of C or greater in MATH 0301, the equivalent, or a suitable score on a mathematics placement test (See “Mathematics Placement Tests” on page 177). Functions, analytic geometry, formulas and variation; set theory; logic; probability and statistics, combinatorics, populations, samples, normal distribution, mean, variance, and standard deviation. This course is as sophisticated as College Algebra and satisfies the state mandated requirement for the baccalaureate degree. Three credit hours.

MATH 1321 Quantitative and Mathematical Reasoning
Prerequisite: A grade of C or greater in Intermediate Algebra or an equivalent transfer course, or a grade of AQ, BQ, CQ, in any of UALR’s Pre-Core Mathematics courses (MATH 0321, MATH 0322, MATH 0323, MATH 0324), or a MATH ACT score of 21 or greater; or an ACT Elementary Algebra score of 11, or an SAT Mathematics score of 500 or greater. (See the Mathematics Placement Tests section in the catalog.) The overarching goal of Quantitative and Mathematical Reasoning is to provide students with mathematical understandings and skills to be productive workers, discerning consumers, and informed citizens. Students will solve problems using mathematical reasoning involving logic, proportions, algebra, and relations. In keeping with the tenets of student performance in a general education course, this course is designed to deliver instruction that focuses on process, conceptual understanding, communication and problem solving found in the following strands: (a) Personal, state and national finance (b) Statistics and probability (c) Mathematical modeling (d) Quantities and measurement. Students seeking a degree in a Non-STEM major are advised to take this course. Note: This course satisfies the state mandated requirement for the baccalaureate degree. Three hours lecture. Three credit hours.

Fine Arts/Humanities (9 credit hours)

Fine Arts (Two of the following courses-6 credit hours):

ARHA 2305 Introduction to Visual Art
Recommended prerequisite: RHET 1311. Introduction to the creative process and history of art, vocabulary and descriptive terms used in the visual arts, and how to write about them. Attendance at arts events is required. Students will learn through writing, reading, discussing, listening, and participating in critical thinking and problem-solving activities. Fulfills core requirement in aesthetics along with student’s choice of either MUHL 2305 or THEA 2305. Three credit hours.

THEA 2305 Introduction to Theatre and Dance
Recommended prerequisite: RHET 1311. Introduction to the creative process and history of theatre and dance, vocabulary and descriptive terms used in these disciplines, and how to write about them. Attendance at arts events is required. Students will learn through writing, reading, discussing, listening, and participating in critical thinking and problem-solving activities. Fulfills core requirement in aesthetics along with student’s choice of either ARHA 2305 or MUHL 2305. Three credit hours.

World Humanities (One of the following courses-3 credit hours):

ENGL 2337 World Literature
Prerequisite: completion of the first year writing requirement. Study of selected texts reflecting various Western and non-Western literary heritages and traditions. Assigned works represent several national literatures, with at least one major text from each of four periods (antiquity, medieval, early modern, and the modern period) and from a minimum of three literary genres. Three credit hours.

ENGL 2338 World Literature Themes
Prerequisite: completion of the first year writing requirement. This class addresses the same competencies as ENGL 2337, but through exploration of a specific topic. Either 2337 or 2338 satisfies the core requirement, but they are distinctive courses and both may be taken for credit. Three credit hours.

PHIL 2320 Ethics and Society
Prerequisite: RHET 1311 recommended. Study of selected texts reflecting a variety of ethical systems from Western and non-Western literary heritages and ethical traditions. Assigned works represent several national ethical literatures, with at least one major ethical text from each of four periods (antiquity, medieval, early modern, and the modern period). Three credit hours.
Science (8 credit hours)
Lab Science (Eight hours from the following courses):

ANTH 1415 Physical Anthropology
A hands-on examination of the study of past and present human and nonhuman primates as biological organisms. Topics include human genetics, variation and osteology, nonhuman primate taxonomy and behavior, forensic anthropology and the human fossil record. Four credit hours.

ASTR 1101 Introduction to Astronomy Laboratory
Prerequisite or corequisite: ASTR 1301 or 1311. A laboratory course designed to accompany ASTR 1301. Projects involve a variety of activities in data acquisition and analysis which tie concepts discussed in the classroom to real-world experiences. Students do these projects in the open laboratory, the planetarium, and the observatory. One credit hour.

ASTR 1301 Introduction to Astronomy
An introductory astronomy course in which students learn about the process of science by studying the various methods by which we have learned our place in the cosmos. Students will study specific examples of the kinds of observations which can be made and the inferences drawn from them. Examples will emphasize how we have obtained our knowledge of the universe and the certainty of various parts of that knowledge. This course, together with the associated lab, ASTR 1101, will satisfy four hours of the science core curriculum requirement. Three credit hours.

BIOL 1400 Evolutionary and Environmental Biology
Evolutionary, ecological, and environmental interrelationships among organisms. Basic biological principles and modern technology form the basis for inquiry and debate. The impact of society upon global biodiversity is examined from competing viewpoints. The role of science in shaping society and the influence of society upon science are evaluated. Students learn through reading, writing, computer simulations, videos, field exercises, and through participation in critical thinking and problem-solving activities. Three hours lecture, two hours laboratory. Four credit hours.

BIOL 1401 Science of Biology
The process of science, including observation, evaluation, and predictions, will be applied to the understanding of biological principles. The methods of science will be illustrated in the study of major biological concepts including the cell theory, energy transformation, inheritance, and the theory of evolution. Selected biological systems will be surveyed to compare life forms to examine current human related issues. Three hours lecture, two hours laboratory. Four credit hours.

CHEM 1409 Chemistry and Society
A general education course for non-science majors which satisfies four hours of the lab science requirement in the University core curriculum. This course examines the impact of chemistry on today’s world. Ideas about the atom, the nature of radioactive elements, chemical bonding, plastics, pollution, drugs, and pesticides are sample topics which will be covered from both a scientific and historical perspective. Satisfies four hours of the lab science requirements in the University core curriculum. Three hours lecture, three hours laboratory per week. Four credit hours.

ERSC 1102 Physical Geology Laboratory
Prerequisite or corequisite: ERSC 1302. A laboratory course designed to accompany ERSC 1302. Students observe, gather and manipulate data, interpret data, and make field measurements using minerals, rocks, graphs, and maps. The laboratory meets for two hours per week. One credit hour.

ERSC 1103 Historical Geology Laboratory
Prerequisite or corequisite: ERSC 1303. A laboratory course designed to accompany ERSC 1303. Students are involved in geologic data gathering, manipulation, and interpretation along with field measurements and problem solving. Two hours laboratory. One credit hour.

ERSC 1302 Physical Geology
Introduction to the science of geology, the geological view of the human environment, how geologists learn about Planet Earth, and how society and geology interact. Active learning applied to natural processes shaping the earth’s surface, producing the solid and fluid earth, and historical development of geological paradigms. Three hours lecture. Three credit hours.

ERSC 1303 Historical Geology
Introduction to the science of geology, how geologists have learned about the Earth using geologic time as a theme. Active learning applied to various measurements of time, the documentation of evolutionary changes presented by the geologic record, and the development of geologic paradigms used in interpreting this record. Three hours lecture. Three credit hours.

Social Sciences (15 credit hours)
World History (Both of the following courses-6 credit hours):

HIST 1311 History of Civilization I
Recommended prerequisite: RHET 1311. The history of the world’s significant civilizations from their beginnings to approximately A.D. 1600: the development of integrated political, social, and economic systems; rise and fall of empires; and the role of science in shaping society. Three credit hours.

HIST 1312 History of Civilization II
Recommended prerequisite: RHET 1311. The history of the world’s significant civilizations since approximately A.D. 1600: examination of the persistence of traditional civilizations and the changes in the world order due to the development of modern industrial society, modern science, and the nation state. Three credit hours.

US Traditions (One of the following courses-3 credit hours):
POLS 1310 American National Government
An introduction to the political institutions, processes, and patterns of the national government of the United States, focusing on the Congress, presidency, and courts, and on their interrelationships. Attention is given to suffrage and elections, political parties, interest groups, and public opinion. Significant issues and problems of national policy such as civil rights and civil liberties are considered. Three credit hours.

HIST 2311 US History to 1877
Description, analysis, and explanation of the major political, social, economic and diplomatic events through “Reconstruction.” Special attention is devoted to the cross-cultural development of three civilizations, Native American, European, and African, within the geographical context of the North American continent. Major topics for study include European colonial empires; the American Revolution; the Constitution of 1787; evolution of a national government, federal in system and republican in form; social and economic theories and practices; relationship with foreign governments; and the American Civil War. Three credit hours.

HIST 2312 US History since 1877
Description, analysis, and explanation of the political, social, economic and diplomatic events to the present time. Special attention is devoted to the forces of modernity and the impact of cultural pluralism on traditional institutions. Major topics for study include industrialization; agrarianism; labor; immigration; reform movements; total and limited war; economic theory and practice; and the US’s role in world affairs. Three credit hours.
Individuals, Cultures, and Society (Two of the following courses-6 credit hours):

ANTH 2316 Cultural Anthropology
Prerequisite: RHET 1311 recommended. Examines the concept of culture, cultural processes, and anthropological theories. Topics include subsistence strategies, politics, religion, gender, ethnicity, economics, marriage, stratification, and socialization. Case studies from both small-scale and large-scale societies. Three credit hours.

CRJU 2300 Introduction to Criminal Justice
An exploration of the historical development, current operation, and future trends of criminal justice. Emphasis on contemporary problems in the definition of law, the enforcement of law, strategies of policing, judicial systems, sentencing strategies, and correctional practices. Content includes not only practices in the United States, but also other cultures and their systems of justice. Three credit hours.

ECON 2301 Survey of Economics
The wants of individuals and societies are unlimited, while the resources for satisfying these wants are limited. Consequently, choices have to be made. Economics is the science of choice. Survey of Economics introduces students to the ability to use theories or models to make sense out of the real world and devise policy solutions to economic problems. Both individual and firm choices (microeconomics) and society choices (macroeconomics) are examined. The role of markets in summarizing choices and allocating resources is introduced. ECON 2301 will not satisfy the University Core Curriculum requirements if ECON 2322 and ECON 2323 are taken for graduation credit. Three credit hours.

ERSC 2300 Science and Technology in Society
Recommended prerequisite: RHET 1311. Introduction to how society is impacted by and responds to science-driven decision-making. Examines how society embraces and applies (including governmental institutions) scientific principles and technological advances to solving global societal problems such as sustainability of natural resources, development of new energy resources due to population and economic growth, changes in climate and weather, pollution, and human health issues. Case studies will examine societal response (particularly governmental) to both past and current scientific and technological issues.

GNST 2300 Introduction to Gender Studies
Recommended: RHET 1311. A cross-cultural, interdisciplinary analysis of gender. Includes examination of gender identity, social roles, and cultural symbolism in politics, economics, family, health, socialization, religion, and language. Three credit hours.

GEOG 2312 Cultural Geography
Recommended: RHET 1311. The nature, distribution, and development of various cultural systems as they interact with each other and with their environment. A study is made of spatial patterns in the elements of culture, including population, religion, language, political ideology, economic activities, and settlement. Examination of the processes that have changed the natural landscape to a cultural landscape. Three credit hours.

MCOM 2330 Mass Media and Society
Survey of relationships involving mass media, culture, and various other interconnected systems, both nationally and globally. Includes discussion of functions, freedoms, and responsibilities of mass media, and effects on individuals and social groups. Topics will include newspapers, magazines, radio, television, and other media. Three credit hours.

POLS 2301 Introduction to Political Science
Introduction to social science concepts as applied to political analysis. Analysis of individuals, groups, and society, particularly the study of social, economic, and political structures and behavior. Introduction to the discipline of political science as a social science, including enduring questions about politics, nature of political analysis, major theoretical and empirical approaches, and critiques of the discipline. Three credit hours.

PSYC 2300 Psychology and the Human Experience
Recommended prerequisite: RHET 1311. Examines the global patterns of contemporary world religions as symbol systems and expressions of discrete, coherent world views. Three credit hours.

PSYC 2305 Introduction to Social Science
Recommended prerequisite: RHET 1311. This course focuses on the development of the individual in the context of physical and social environments. Topics include the scientific method as it applies to studying the individual, the relationship between brain and behavior, social and personality development, theories of motivation, maladaptive behavior, social cognition and interaction, and the effects of membership in different groups on the development of the individual. Students will learn through writing, reading, discussing, listening, and participating in critical thinking and problem-solving activities. Three credit hours.

RELS 2305 Religious World Views
Prerequisite: RHET 1311 recommended. Examines the global patterns of contemporary world religions as symbol systems and expressions of discrete, coherent world views. Three credit hours.

SOCI 2300 Introduction to Sociology
Recommended prerequisite: RHET 1311. Introduction to sociological concepts. Analysis of society, particularly the study of human organization. An overview of the theories and methods utilized in the discipline is provided and will be used as a framework for critical analysis. Students will learn to investigate group and societal connections in major social institutions—religion, family, politics, economics, education. Three credit hours.

Core Requirements for Double Majors in the Donaghey College of Engineering and Information Technology

Either core is acceptable for a student pursuing a double major with one major in EIT and the other in a different college. However, should the student not complete the double major prior to a baccalaureate degree being awarded, the core required for the degree awarded must be completed. In all instances, program requirements normally satisfied by a core course must be completed whether or not that course satisfies a core requirement for the student. (Approved by the Undergraduate Council 10/13/99- EIT is referred to as CISSE in the original policy.)
Office of Records and Registration
Joyce Hall, Registrar

Student Services Center, 2nd Floor, (501) 569-3110, http://ualr.edu/records | Registration Website: http://ualr.edu/registration

The primary functions of the Office of Records and Registration are to manage registration in classes and maintain the official academic records of all UALR students. The office provides a number of online services to students through their BOSS accounts, such as the following:

- Register for Classes
- Request Enrollment Verification
- Request Degree Verification
- Order Official Transcripts
- Print an Unofficial Transcript

Online Registration Guide and Class Search

The academic year includes two regular semesters in the fall and spring, each with sessions within the term, and a summer semester with four terms. Some courses are also available between semesters during late spring and winter interim.

The unit of credit is the semester hour. This unit is defined as credit earned for the completion of one hour per week in class for one semester. Two hours or more of laboratory work per week for one semester equal one semester hour of credit. UALR offers night and weekend courses, web-based courses, courses on campus and at various off-campus locations. Admission requirements, fees, and academic performance for night and weekend classes are the same as for day classes. Web-based courses are charged a technology fee.

Continuing-education courses are offered as a service to specific professional and vocational groups of the community. These are available on both credit and non-credit basis.

After you have been advised, the next step toward taking courses at UALR is to view the UALR Registration Guide and Class Search.

The UALR Registration Guide and Class Search contain information on the web registration process and lists the courses that will be offered during specific semesters by course, time, location, and instructor. The Guide and Search also contain the academic calendar, the final examination schedule, and deadlines for various activities during the semester.

UALR offers courses in the fall, spring, and summer. The Summer semesters are divided into one 10-week term (Summer I), and three 5-week terms (Summer II, III, and IV). UALR also offers courses at other times, such as during the interim between each semester and at different time periods during a semester or term.

A student may not enroll for more than 18 credit hours in a regular semester (Fall or Spring) or more than 7 credit hours in a five-week Summer term without prior permission of the person who approves his or her degree plan.

Courses and programs are also offered through distance delivery as well as at off-campus locations. Off-campus and online credit courses are identified by location in the UALR Registration Guide and Class Search.

During a regular semester or term, the usual three-credit-hour daytime course will meet for 50 minutes a day on Monday, Wednesday, and Friday, or for 1 hour and 15 minutes on either Monday and Wednesday or Tuesday and Thursday.

Some classes will meet on different time schedules, such as one three-hour session per week. All these options are part of UALR’s effort to offer classes in times and places that suit the needs of all students, but it also means you have to read the UALR Registration Guide and Class Search carefully.

A typical course entry and an explanation of each part of this listing is provided below. The format of the information may vary depending on which view of the student schedule you use, but the meaning of each component will be the same.

**CRN: 60736  HIST  1311  01  Hist Of Civilization I**

**Class meets: MWF 8:00am–8:50am**

**Instructor:** Anson, Edward M.

**Available Seats: 0**

- CRN: 60736 - The five-digit course reference number (CRN) assigned for registration. The five-digit CRN number is necessary for registration and is not the same as the course number.
- Subject HIST - The department or curriculum area with its assigned four-letter code. In this case, it is “HIST” for “History.” See “Four-Letter Course Codes” for more details.
- Course Number 1311 - The course number assigned by the department. It indicates the level and number of credit hours for the course. Note: The second number indicated the semester hours. This class is 3 semester credit hours.
- Section 01 - The section number assigned by the department.
- Title Hist Of Civilization I - The course title. Abbreviated versions of longer course titles may be used. Descriptions of all courses appear within their respective departments in numerical order by course number.
- Available Seats: 0 - This is the total number of students that may sign up for this class.
- Class meets MWF - The days the class meets, in this case each Monday, Wednesday, and Friday. Other abbreviations include “MW” or Monday and Wednesday, “TR” or Tuesday and Thursday, “S” means Saturday, “U” means Sunday, and “TBA” indicates “to be announced.” “TBA” is often used for online classes.
- 8:00 am – 8:50 am - The time the class begins and ends. The abbreviation TBA in this place means “to be announced.” The exact time for TBA courses will be provided by the department or instructor.
- Instructor: Anson, Edward M. - The name of the instructor assigned to this class. If the word “Staff” appears here, the teacher for the class had not yet been assigned at the time the schedule was prepared.
<table>
<thead>
<tr>
<th>Four-Letter Course Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
</tr>
<tr>
<td>ADED</td>
</tr>
<tr>
<td>ADVT</td>
</tr>
<tr>
<td>ANTH</td>
</tr>
<tr>
<td>ARAD</td>
</tr>
<tr>
<td>ARED</td>
</tr>
<tr>
<td>ARHA</td>
</tr>
<tr>
<td>ARST</td>
</tr>
<tr>
<td>ASCI</td>
</tr>
<tr>
<td>ASTR</td>
</tr>
<tr>
<td>AUSP</td>
</tr>
<tr>
<td>BINF</td>
</tr>
<tr>
<td>BIOL</td>
</tr>
<tr>
<td>BSAD</td>
</tr>
<tr>
<td>CHEM</td>
</tr>
<tr>
<td>CHIN</td>
</tr>
<tr>
<td>CLNG</td>
</tr>
<tr>
<td>CNMG</td>
</tr>
<tr>
<td>CNSL</td>
</tr>
<tr>
<td>COUN</td>
</tr>
<tr>
<td>CPSC</td>
</tr>
<tr>
<td>CRJU</td>
</tr>
<tr>
<td>CSPA</td>
</tr>
<tr>
<td>DANC</td>
</tr>
<tr>
<td>ECED</td>
</tr>
<tr>
<td>ECET</td>
</tr>
<tr>
<td>ECON</td>
</tr>
<tr>
<td>EDAS</td>
</tr>
<tr>
<td>EDFN</td>
</tr>
<tr>
<td>ENGL</td>
</tr>
<tr>
<td>ENHS</td>
</tr>
<tr>
<td>ERSC</td>
</tr>
<tr>
<td>ETME</td>
</tr>
<tr>
<td>FINC</td>
</tr>
<tr>
<td>FREN</td>
</tr>
<tr>
<td>GATE</td>
</tr>
<tr>
<td>GEOG</td>
</tr>
<tr>
<td>GERM</td>
</tr>
<tr>
<td>GERO</td>
</tr>
<tr>
<td>GNST</td>
</tr>
<tr>
<td>HIED</td>
</tr>
<tr>
<td>HIST</td>
</tr>
<tr>
<td>HSCI</td>
</tr>
<tr>
<td>IBUS</td>
</tr>
<tr>
<td>IFAS I</td>
</tr>
<tr>
<td>IFSC I</td>
</tr>
<tr>
<td>IGSC</td>
</tr>
<tr>
<td>INTR</td>
</tr>
<tr>
<td>INTS</td>
</tr>
<tr>
<td>ITEC</td>
</tr>
<tr>
<td>LANG</td>
</tr>
<tr>
<td>LAW</td>
</tr>
<tr>
<td>LAWB</td>
</tr>
<tr>
<td>LESC</td>
</tr>
<tr>
<td>LIST</td>
</tr>
<tr>
<td>LSBE</td>
</tr>
<tr>
<td>MATH</td>
</tr>
<tr>
<td>MCED</td>
</tr>
<tr>
<td>MCOM</td>
</tr>
<tr>
<td>MGMT</td>
</tr>
<tr>
<td>MKTG</td>
</tr>
<tr>
<td>MSCI</td>
</tr>
<tr>
<td>MUAP</td>
</tr>
<tr>
<td>MUED</td>
</tr>
<tr>
<td>MUEN</td>
</tr>
<tr>
<td>MUHL</td>
</tr>
<tr>
<td>MUPR</td>
</tr>
<tr>
<td>MUTH</td>
</tr>
<tr>
<td>NPLS</td>
</tr>
<tr>
<td>NURS</td>
</tr>
<tr>
<td>PADM</td>
</tr>
<tr>
<td>PEAW</td>
</tr>
<tr>
<td>PFSL</td>
</tr>
<tr>
<td>PHIL</td>
</tr>
<tr>
<td>PHYS</td>
</tr>
<tr>
<td>POLS</td>
</tr>
<tr>
<td>PSYC</td>
</tr>
<tr>
<td>PVYS</td>
</tr>
<tr>
<td>RACE</td>
</tr>
<tr>
<td>READ</td>
</tr>
<tr>
<td>RELS</td>
</tr>
<tr>
<td>RHBL</td>
</tr>
<tr>
<td>RHET</td>
</tr>
<tr>
<td>SCED</td>
</tr>
<tr>
<td>SCHL</td>
</tr>
<tr>
<td>SOCI</td>
</tr>
<tr>
<td>SOWK</td>
</tr>
<tr>
<td>SPAN</td>
</tr>
<tr>
<td>SPCH</td>
</tr>
<tr>
<td>SPED</td>
</tr>
<tr>
<td>STAT</td>
</tr>
<tr>
<td>SYEN</td>
</tr>
<tr>
<td>TCED</td>
</tr>
<tr>
<td>THEA</td>
</tr>
</tbody>
</table>

UALR Undergraduate Catalog
## Tuition and Fees

### Undergraduate Tuition (per credit hour)

<table>
<thead>
<tr>
<th></th>
<th>Arkansas Residents</th>
<th>Non-residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Semester Credit Hour</td>
<td>$191.00</td>
<td>$520.00</td>
</tr>
<tr>
<td>College of Business Courses</td>
<td>$200.00</td>
<td>$540.00</td>
</tr>
<tr>
<td>Donaghey College of Engineering and Information Technology Courses</td>
<td>$200.00</td>
<td>$540.00</td>
</tr>
</tbody>
</table>

### Per Semester Hour

<table>
<thead>
<tr>
<th>Required Fees:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities (excluding Law School)</td>
<td>$6.00</td>
</tr>
<tr>
<td>General</td>
<td>$17.50</td>
</tr>
<tr>
<td>Athletic</td>
<td>$16.10</td>
</tr>
<tr>
<td>Health Services</td>
<td>$2.00</td>
</tr>
<tr>
<td>Technology Infrastructure</td>
<td>$2.75</td>
</tr>
<tr>
<td>Application Processing (1st Time Applicant)</td>
<td>$40.00</td>
</tr>
<tr>
<td>Re-application Processing (Per re-application)</td>
<td>$15.00</td>
</tr>
</tbody>
</table>

### College Technology Fees:

- Arts, Humanities, and Social Sciences Courses: $8.10
- Business Courses: $8.10
- Education Courses: $8.10
- Engineering and Information Technology Courses: $11.90
- Professional Studies Courses: $8.10
- Science and Mathematics Courses: $12.30
- Off-Campus Courses (includes web based courses): $10.00 – $25.00

### Special Fees (as applicable)

- Campus ID Card Replacement: $15.00
- Installment Payment Plan: $30.00
- International Student Application: $40.00
- International Student Service (per term): $125.00
- International Student Health Insurance (Market Rate): per year $1,210.00
- Late Installment Payment Plan: $100.00
- Late Installment Payment (per payment): $30.00
- Late Payment (depending on date): $50.00 – $100.00
- Late Registration: $100.00
- Library Non-student User Circulation: per semester $45.00, per year $100.00
- Optional Individual Math Skills Review: $150.00
- Returned Check: $20.00
- Transcript (Official Copy): $5.00

### Program Specific Fees

- Ph.D. and Ed.D. Degree Graduation Fee: $80.00
- Thesis Publication Fee: $45.00
- Dissertation Publication Fee: $55.00
- Art Studio Materials: $12.00

### Audiology/Speech Pathology Practicum

- Half-hour lesson (1 credit hour course): $60.00
- One hour lesson (2 or 3 credit hour course): $100.00

### Education

- Experimental Learning Fee (per course): $25.00-$60.00
- Praxis Testing (Dependent upon subject): $65.00-$90.00
- Student Teacher Practicum Supervision
- In-state: $210.00
- Out-of-state: $315.00

### Music Private Applied Instruction

- Half-hour lesson (1 credit hour course): $60.00
- One hour lesson (2 or 3 credit hour course): $100.00

### Nursing

- Testing: $25.00
- Clinical Nursing: $30.00
- Performing Arts Production: $12.00

### Social Work Placement (per semester)

- $60.00

### Housing Fees

#### Residence Hall

- Application Processing: $35.00
- Security Deposit: $100.00
- Fall and Spring Semesters (per term)
  - Double Bedroom: $1,730.00
  - Single Bedroom: $2,416.00
  - Laundry Fee: $33.00
- Summer (per five-week term)
  - Double Bedroom: $466.00
  - Single Bedroom: $680.00
  - Laundry Fee: $11.00
- Residence Life Programming Fee
  - Fall and Spring (per term): $16.00
  - Summer (per term): $6.00

#### UALR-owned Houses and Apartments

- Price per month: $450-$750
  - a) Depending on size, furnishings, and condition.

#### Meal Plans

- Residential Plans (per term): $500.00-1,800.00
- Commuter Plans (per term): $100.00-$1,000.00

Tuition and fee information was subject for approval at the time of publication. For the most accurate and comprehensive tuition and fee information, visit [http://ualr.edu/bursar/index.php/home/tuition-and-fees/undergraduate-tuition-fees-spring-2009/](http://ualr.edu/bursar/index.php/home/tuition-and-fees/undergraduate-tuition-fees-spring-2009/).

Tuition and fee charges for classes that are taken for audit are the same as those for credit classes. Other fees for seminars and special courses may be charged. All fees are subject to change without notice. All tuition and fees are due at the time of the student’s registration. UALR accepts MasterCard, Visa, and Discover. Students whose tuition checks are returned are subject to administrative withdrawal. Any student who is an Arkansas resident and has reached the age of 60 years or older by the last day of registration may enroll (on a space available basis) free of tuition. In such cases, special fees for certain leisure science and music instruction courses are required. Students must provide proof of age to the Office of Admissions and Financial Aid.
Parking Fees

Every student who parks a motorized vehicle on the main UALR campus is required to register that vehicle with the Department of Public Safety and display a parking permit as instructed. There is no fee to register one vehicle. Permits for additional vehicles are $20 annually.

Reserved parking fees are $150.00 annually for twenty four hour access. Lot choices are lot #s 3, 4, 5, 7, 8, 9, and the lower level of the parking deck. Reserved parking is available on a first come first served basis. Reserved parking may be arranged at the Department of Public Safety. Students are also allowed to park in the metered lots or UALR’s parking deck. The fee for parking in the metered lots is $1.00 per hour with a 2-hour time limit, and the fee for the parking deck is $1.00 per exit.

Schedule Adjustment

Students who reduce their course load by dropping one or more courses may or may not be entitled to a reduction in charges. Visit http://boss.ualr.edu/ and choose the UALR Registration Guide and Class Schedule for the dates of the schedule adjustment period.

Tax-Deductible Educational Expenses

The cost of college educational expenses may be deductible on an individual’s federal income tax return if classes are taken:

• To maintain or improve the skills required in the individual’s trade or business, or required in performing a present job
• To meet the specific requirements of an employer or the requirements of law for retention of present employment, salary, or status
• Such that the criteria for the Hope Scholarship Credit or the Lifetime Learning Credit are met
• These credits can be applied to tax returns if the student meets the eligibility requirements.

This section should not be construed as tax advice. Students should consult a tax advisor or contact the local office of the Internal Revenue Service.

Withdrawal from UALR

Students voluntarily withdrawing from UALR must complete the University Withdrawal Form and have an exit interview with a staff member in the Office of Admissions and Financial Aid if receiving financial aid. Withdrawal forms are available in the Office of Records and Registration. The last day to officially withdraw from the University without a grade penalty is listed in the Academic Calendar and on the UALR website. Students who fail to officially withdraw will be reported as having failed the course work for the semester, and grades of F will appear on their official transcripts. Students who have questions about withdrawing should contact the Office of Records and Registration.

Students who officially withdraw from UALR (withdrawal from all classes) during a regular fall or spring semester are entitled to a refund of instructional fees in accordance with the following schedule:

1st class day through the 5th class day – 100%
6th class day through the 10th class day – 50%
After the 10th class day – None

To avoid charges for a summer term, a registered student must officially withdraw from all classes prior to the first day of classes for that term. Refund schedules for current terms may be found in the UALR Registration Guide and Class Schedule.

1. Non-attendance does not constitute a withdrawal.
2. An official withdrawal does not penalize or prevent a student from re-enrolling at a future date.
Transfer Student Services

The University of Arkansas at Little Rock welcomes transfer students and is committed to making their transition and transfer of credit as smooth as possible. The Office of Transfer Student Services was established in April 2009

- to seek solutions,
- to expedite the articulation of core transfer credit,
- to troubleshoot core curriculum transfer issues for students, faculty, and staff,
- to help inform policy change that will reduce barriers for undergraduate students with core transfer credit.

The Office of Transfer Students provides dynamic student service to meet the transfer credit evaluation needs of continuing, current, new, and prospective UALR transfer students. Our main goal is to make transferring to UALR easier for students to accomplish and the transfer process easier to understand. We provide a friendly starting place for transfer students to connect with essential information and resources. Our office is located in room 321 E on the third floor of the Student Services Center.

Transfer Student Types for Admission and Finance Aid Eligibility

For the purposes of admission and eligibility for financial aid, UALR defines types of transfer students according to the number of hours they have previously earned and their intention to earn a degree either with UALR or with another college or university.

Transfer students are those who have previously attended another institution of higher learning and have at least 12 transferable college-level credit hours and a grade point average of at least 2.00 on all previous college work. Transfer students intend to earn an academic degree at UALR, even though they may be in the process of earning an associate’s degree at another college when they apply for admission to UALR. Although transfer students may be allowed to attend UALR for one semester provisionally (See “Provisional Admission” below) to allow time to receive official, required credentials in order to be granted regular admission status and to be eligible to receive financial aid, applicants must submit:

- Completed application for admission ($40 non-refundable application fee required).
- Official, sealed transcripts from ALL postsecondary institutions attended (e.g. universities, colleges, community or junior college, technical or professional schools).
- Proof of two MMR immunizations (required of all applicants born after January 1, 1957).
- Freshman transfer students are those who have previously attended another institution of higher learning and have less than 12 transferable college credit hours. These students intend to earn an academic degree at UALR, but have not completed the equivalent of one, full-time semester’s enrollment at another college or university, so they must meet and submit all of the admission requirements for entering freshmen, as follows:
  - Final High School transcript showing cumulative GPA of at least 2.5.
  - Minimum ACT composite score of 21 (or equivalent combined critical reading and math SAT I score of 990) based on scores earned within the last five years.
- Proof of two MMR immunizations (required of all applicants born after January 1, 1957).
- Official, sealed transcripts from ALL postsecondary institutions you have attended (e.g. universities, colleges, community or junior college, technical or professional schools).

Transient students are those who previously and/or currently attend(ed) another institution of higher learning and are planning to transfer credits earned at UALR back to that college or university to apply toward a certificate or degree. These students must submit a letter of good standing from the institution in which they are enrolled to the Office of Admissions at UALR. Transient status is limited to one semester or two summer terms. Further enrollment in this status is not permitted unless the student has returned to his or her original institution or has attended another institution before reapplying. Students in this category are not eligible for federal financial aid.

Provisional Admission

Transfer students who have not submitted all credentials necessary for admission by the application deadline may be admitted provisionally. In such cases, the student is admitted with the provision that s/he submit the missing admission credentials by the end of the term during which provisional admission was granted. The credentials will be evaluated upon receipt, and the student will be admitted and placed in the appropriate student status, or deferred admission.

IMPORTANT NOTE: Although official policy states that transfer students may be provisionally admitted as long as missing admission credentials are submitted within the term of admission, UALR cannot accurately evaluate transfer hours, advise, release financial aid funding for which students may be eligible, or guarantee registration in degree appropriate courses until ALL admission credentials have been received and processed by the Office of Admissions and Financial Aid. Transfer students cannot be fully admitted or receive financial aid funding until all admissions credentials have been received, processed, and all financial aid requirements have been met.

If evaluation of the records shows that the student does not meet UALR’s minimum admission requirements, the student may be required to reduce the number of courses for which he or she is currently enrolled. For example, the student may be limited to no more than seven credit hours of enrollment. Such reductions may occur after the semester has already begun, in which case the student may be required to withdraw from some courses.
Transferring Credit to UALR

Credit can be transferred to UALR in a variety of ways. Some involve earning credit before enrolling at UALR (matriculating) and some afterwards. UALR does not accept the following types of credits:

- Remedial/developmental/study skill courses (these courses are indicated on the transcript but no credit hours are transferred)
- Courses marked “in progress”
- Courses from institutions of higher learning which do not have accredited or candidacy status in a regional accrediting association (See section on Transferring Credit Before Matriculation for details)
- Courses designated as credit/no credit, pass/fail, audit or satisfactory
- Earlier attempts of a course repeated at a transfer college or university. Only the latest attempt of a course’s credit hours will transfer

Transferring Credit before Matriculation

UALR recognizes academic credits earned at other regionally accredited postsecondary institutions. Regionally accredited means that an institution of higher learning is accredited by one of the six regionally stipulated accreditation agencies approved by the U.S. Department of Education and the Council for Higher Education accreditation (CHEA), including: Middle States Association of Colleges and Schools Commission on Higher Education, New England Association of Schools and Colleges Commission on Institutions of Higher Education, North Central Association of Colleges and Schools Commission on Institutions of Higher Education, Northwest Association of Schools and Colleges Commission on Colleges, Southern Association of Colleges and Schools Commission on Colleges, and Western Association of Colleges and Schools Accrediting Commission.

Final transcript evaluation will occur only after all required admissions’ credentials have been received. Students interested in receiving an unofficial evaluation of transfer credits prior to admitting to UALR, may request an unofficial evaluation from the Office of Transfer Students Services (OTSS) by completing and submitting a “Transfer Credit Evaluation Request” (form located at http://ualr.edu/transfer/index.php/home/ask-a-transfer-advisor/). Please note that an unofficial evaluation will require submission of transcripts to OTSS.

Transcripts from institutions not accredited by the regional accrediting associations will be handled at the discretion of the Registrar. Students presenting such transcripts may be given provisional credit subject to the satisfactory completion of further work at UALR in subjects for which they are asking advanced standing and a satisfactory grade point average. However, such transcripts may be refused altogether.

Only official transcripts will be accepted for evaluation. They must include complete records of the courses taken at all other institutions and be sent to UALR by the institutions. The director may also request that a course description or syllabus be presented.

Only credit hours earned at other institutions will transfer; grades and GPA do not transfer and are not calculated in the student’s GPA earned at UALR. However, all grades from all Universities are calculated for the purpose of awarding graduation honors.

Only courses with grades of C or greater will transfer automatically; however, a student may request to transfer as many as 6 credit hours with a grade of D from any regionally accredited college or university.

Credit for the hours will be accepted as transfer credit if the course satisfies a degree program requirement and if a student would be allowed to earn a grade of D if the class were offered at UALR. A student may take advantage of this policy at any time prior to the awarding of an undergraduate degree. For more information on the transfer of D grades, please see UALR Policy 501.10.

There is no limit on the amount of credits that a student may transfer to UALR, but students graduating with four-year degrees (baccalaureate) must earn 30 hours in residence at UALR. Students graduating with two-year degrees (associate) must earn 15 hours of credit in residence at UALR. Please note that some degree programs may have restrictions on the number of upper-level courses that may be used to satisfy major or minor program requirements. For certain degree programs, some credits may be non-applicable due to course content changes over time.

Transferring Core or General Education Courses

As a public, state institution, UALR participates in the State Minimum Core Curriculum, which allows students to transfer up to 35 hours of general education or core courses among Arkansas institutions. Students transferring to or from UALR and another publicly supported Arkansas college or university are encouraged to check with their advisors and the Office of Transfer Student Services to assure proper transfer of core or general education courses.

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 equitable treatment in the application of credits for admissions and degree requirements. Students may complete specified General Education courses anywhere in the public system as well as many courses in the degree/major that have been pre-identified for transfer. We hope this site is helpful for students, parents and campus personnel. This system is designed to assist in planning from the high school level through the adult workforce.

Transferring Associate Degrees

In-State Public Associate Degrees Designated for Transfer under ACT 182 of 2009

Students entering the University with an associate of arts, associate of science, or associate of arts in teaching degree that is from an Arkansas college or university, earned after January 2010 and designated for transfer in accordance with ACT 182 of 2009 meet the UALR core requirements, effective Summer semester 2010. Students transferring to UALR with such degrees are not required to take additional lower-level general education courses except under the following conditions:

- As a prerequisite for courses in the transfer student’s baccalaureate degree program.
- A discipline-specific course that is required by the transfer student's baccalaureate degree program and the student has not completed 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.
- A requirement of an independent licensing or accrediting body.

Students entering UALR with an associate of arts or associate of science degree from a public Arkansas college or university that is not designated for transfer in accordance with ACT 182 of 2009 and students transferring associate of arts or associate of science degrees from in-state private and/or out-of-state colleges or universities are subject to the transfer policy indicated in the following section (Transferring All Other Associate Degrees). Students with questions about the transferability of previously earned associate’s degrees are invited to contact the Office of Transfer Student Services for clarification.

Associate of Applied Science Degrees

Associate of applied science degrees are handled on a course-by-course basis for applicability.

Transferring all other Associate Degrees

Students entering the University with an associate degree that is not designated as a transferable degree under Act 182 (see section In-State Public Associate Degrees Designated for Transfer under ACT 182 of 2009 above) and that is not an associate of applied science (see section Associate of Applied Science Degrees above) will demonstrate their degree came from a regionally accredited college or university and includes the following:
3 hours of college algebra or college mathematics, or higher mathematics course
6 hours of English composition
9 to 15 hours of social science including a 3-hour course on U.S. history or U.S. government
8 hours of lab science
6 to 12 hours of arts and humanities, and
0 to 3 hours of speech

Such a degree will satisfy UALR’s core requirements. Students who have an associate degree of at least 60 hours and are missing some of this distribution of courses will be required only to add the courses they are missing. Students with questions about the transferability of previously earned associate’s degrees are invited to contact the Office of Transfer Student Services for clarification.

Special Transfer Credit

Transferring Credit by Examination

Students who take CLEP, AP, DANTES, International Baccalaureate, and Excelsior College Examinations must have official score reports sent directly to the UALR Office of Testing Services for evaluation. Credit obtained through examination is recorded as approved hours on the student’s official transcript without grade points after the student has been enrolled at UALR for one semester. Additional information may be obtained from Testing Services by calling (501) 569-3198 or on their website.

Transferring Military Service Credit

In 2008, the Faculty Senate by unanimous vote approved accepting military credit certified by ACE as equivalent to college level courses for transfer to UALR. Official transcripts must be provided for evaluation and should be requested based on the branch of service (DD Form 295, or ARRTS, SMARTS, etc.). Military transcripts should be submitted to UALR’s Office of Admissions, which after document imaging will forward on to Kathy Oliverio, military ombudsman, to evaluate for the awarding of potential academic credit. For additional information concerning this process, please contact Kathy Oliverio at kmoliverio@ualr.edu or (501) 569-3204. Please note that UALR does not automatically transfer military credits based on evaluations by other universities.

Transferring Technical and/or Vocational Credit

UALR does not automatically transfer technical and/or vocational credits from other universities. Students with technical and/or vocational credits who would like this credit considered for approval credit toward a specific degree program may consult with their departmental advisor after officially declaring a major. Any transfer of technical and/or vocational credit requires the signature of a departmental advisor on a Request to Receive Credit for Technical and/or Military Credit form to be submitted to the Office of Records and Registration for processing.

Transferring International Credit

Students who have earned college level credit at an international college or university should submit official transcripts from these institutions of higher learning with an English translation of these documents (if applicable) to the Office of International Services. International transfer students must meet additional admission requirements as detailed in the “Office of International Service” portion of this catalog.

Any applicant for whom English is not the first language must furnish or demonstrate proof of English language proficiency before starting classes at UALR. For detailed information concerning these requirements, please contact the Office of International Services at (501) 683-7566.

After the Office of International Services verifies and posts international transfer credits to an entering transfer student’s UALR transcript, and once all admissions’ credentials have been received and processed, the student’s file will be forwarded to the Office of Transfer Student Services to evaluate the application of transfer credits toward core curriculum requirements in the student’s academic major (or intended major). In order for international transfer credits to be articulated, the student must provide English translations of course descriptions to the Office of International Services or Office of Transfer Student Services.

Since the evaluation and articulation (process of applying credit towards UALR degree requirements) of international transfer credit generally takes 3-4 weeks at minimum, it is strongly recommended that students with international transfer credit submit all required documentation as early as possible.

Transferring Occupational Programs Credit

UALR will accept up to 16 hours of lower level undesignated elective credit for occupational programs from accredited institutions. Students to whom this might apply should have their transcripts evaluated by the Office of Records and Registration (501) 569-3110. An evaluation of credit will not be made until after a student is enrolled at UALR.

Transferring Credit after Matriculation

UALR students may choose to enroll at another regionally accredited, academic institution while attending or intending to return to UALR as a degree-seeking student. In order to assure that the credit received elsewhere meets UALR degree program requirements, students are strongly advised to consult with their academic advisor (if declared majors) or if they intend to take core curriculum courses at another college or university before the declaration of a major, students should consult with the Office of Transfer Student Services at (501) 682-1183.

Articulation of Transfer Credit

If you are a transfer student, you are strongly urged to seek advising before you register for classes. Final transfer credit articulation (the process of determining course equivalencies and/or application of transferred courses toward meeting degree program requirements) will only occur after students are fully admitted to UALR and their transfer credits have been posted to the UALR transcript. Because transfer credit articulation impacts course placement and registration, transfer students with an incomplete admissions’ status may need registration overrides into core, major, or minor courses during the first semester on campus.

The transfer credit equivalency guide for Arkansas and regional schools is available on the OTSS website and includes upper level (junior and senior) course that are not part of the Arkansas Course Transfer System. IMPORTANT NOTE: If a particular institution of higher learning does not appear in this guide, it does not mean that UALR will not accept course work from that institution. Also, if an institution appears in the guide, but the particular course you are seeking is only listed as being accepted for general elective credit, please consult further with your academic advisor.

All transfer students are initially admitted into University College. After you have decided on a major, ask the department chairperson or the dean of the college in that area to evaluate your transfer work. One often misunderstood point is that a given course may be accepted toward the total hours required for a degree at UALR, but may not be accepted as meeting a specific course requirement for the core curriculum or for a major or minor. The process of transfer credit articulation may take several weeks at minimum to process after a student has been fully admitted to UALR.

Transfer Students and Undergraduate Catalog Choice

Transfer Students may choose to follow requirements of an older undergraduate catalog of requirements at UALR. A student transferring to UALR from regionally accredited four-year institutions, community colleges, or junior colleges with 13 or more hours of accepted credit may graduate under the provisions of a UALR Undergraduate Catalog in effect during any semester of the previous five years in which they were enrolled at the other institution. Note: At no time may a student follow the provisions of a UALR Undergraduate Catalog that is more than five years old at the time of the student’s entry into UALR.

Transfer Students and the First-year Composition Requirement

Students transferring 60 or more hours to UALR who have met the first-year composition requirement at the higher learning institution(s) previously attended may be exempted from UALR’s first-year composition requirement. The decision to exempt a student from this requirement is made by the student’s major department chairperson when the student files a degree plan.
Office of International Services
Allyson Hughes, Assistant Director
Wang Chao, Senior International Student Advisor
Pattie German, International Admissions Coordinator
Vacant, Programs Abroad Coordinator
Lauren Sukany, Administrative Specialist
Education Building, Room 101, (501) 683-7566, Fax (501) 683-7567

The Office of International Services (OIS) provides comprehensive assistance to international students concerning legal and institutional requirements for studying at UALR, and to domestic students concerning studying abroad. The office advises students about immigration requirements and transfer credit, conducts international student orientation, assists international students regarding living and studying on an American campus, assists with housing, and provides advisory services for matters involving nonacademic concerns. The office also develops and facilitates exchange and study abroad programs. Exchange programs provide students and faculty members with an opportunity to travel abroad for educational and research purposes. The office works in cooperation with other units on campus that deal with international students, as well as those that facilitate various aspects of the study abroad process.

Programs Abroad and Study Abroad
Vacant, Coordinator

The University provides numerous opportunities for students and faculty members to travel abroad for educational and research purposes. Formal agreements with foreign universities facilitate bilateral exchanges, which insure a consistent and lasting relationship that benefits students at both institutions. Study abroad provides students with opportunities to explore other cultures through classroom and field experiences; increase their communication skills, cultural awareness, leadership skills, flexibility, and maturity; develop proficiency in a foreign language in a context of daily use; and draw upon the vast cultural, intellectual, and historical resources of another country. The University coordinates study abroad programs in Austria, China, France, Germany, Ghana, Great Britain, Hong Kong, India, Mexico, Norway, Poland, Romania, Spain, Taiwan, and Turkey.

If UALR does not offer a program that fits your needs, the Office of International Services will assist you in finding one that best fits your academic goals, linguistic abilities and interests.

All programs abroad must be approved by the UALR Office of International Services prior to departure and course enrollment in a foreign program. UALR credit will not be granted otherwise. UALR has the right to adjust both the level and number of UALR credits given for courses taken in foreign programs based on placement examinations given by the foreign institution.

International Student Services
Allyson Hughes, Assistant Director
Education Building, Room 101, (501) 683-7566, http://ualr.edu/international

Office of International Services (OIS) is responsible for the admission for all undergraduate level international students, immigration advising of all international undergraduate and graduate students. In addition, OIS handles all requests for the J Visa exchange visitor program which includes exchange students and visiting researchers and professors. OIS also conducts regular programs on a wide range of topics including:

- International Student Orientation
- Employment and Tax workshops
- Monthly “Lunch with Advisor”
- “Ask an Advisor” online chat room
- “OIS collaborates with other on-campus departments hosting “Immigration Panel,” “Getting the Most Out of Your Classes,” and “International Celebration Week”

Admission of International Students (for Graduate Admissions, please see the UALR Graduate Catalog)

International students applying for admission to the University of Arkansas at Little Rock must apply online and submit complete credentials and detailed information before being considered for admission. UALR is authorized under federal law to enroll non-immigrant alien students. All required items must be received at UALR by July 1 for the fall semester and November 1 for the spring semester. However, applications will be considered on a case-by-case basis after these deadlines if at least partial documentation has been received.

Requirements:
1. Apply online at http://boss.ualr.edu/
2. Submit a nonrefundable $40 application fee.
3. Submit evaluation of high school transcripts (entering freshmen) or all post-secondary school transcripts (transfer students with 12 or more credit hours)
4. Demonstrate proof of English proficiency in one of these ways:
   • Present a score of at least 525 (paper-based) or 71 (iBT) earned within the last two years on the Test of English as a Foreign Language (TOEFL) (UALR Code is: 6368); or
   • Present a score of at least 6 on the IELTS, earned within the last two years; or
   • Take the Michigan Test (formerly known as the Institutional English Language Test), administered on campus. Please contact the Intensive English Language Program for specific information call (501) 569-3467; the test must be taken before class registration; or
   • Successfully complete the UALR Intensive English Language Program through the final level (see IELP section); or
   • Completed English Composition I and II at a regionally accredited post secondary U.S. institution with a C grade or better; or
   • Studied full-time for two or more years at a college or university where English is the language of instruction located in a country where English is the native language are exempt from the TOEFL or the IELTS.

5. Submit a financial statement (F and J visas only): students must provide certified proof that they are financially capable of pursuing an education in this country. The estimated cost for books, fees, and living expenses is $22,000 for an academic year.

6. Submit Visa documents

7. F/J student transferring from another institution within the United States must submit a Transfer of Visa Form completed by the student and by the foreign student advisor of the institution the student is currently attending. This form can be found online at our website under the Documents and Forms link.

8. Immunizations: OIS strongly encourages all new international students to receive the required MMR immunizations before they arrive. Submit a copy of your immunization records showing day, month, and year you received vaccines. Complete an international Student immunization Form. This form must be signed by your doctor. Send the original, notarized letter from your doctor stating the dates when you received the two required MMR vaccines. Please visit our website for more information regarding immunization changes at UALR.

Requirements upon Arrival at UALR for International Students

Assessment of new freshmen for academic placement: All first-time entering freshman students who have not taken the ACT (American College Test – UALR Code is: 0132) or SAT (Scholastic Aptitude Test – UALR Code is: 6368) will be required (upon arrival on campus) to be further assessed for academic placement purposes by taking the Compass Test. Students transferring 12 or fewer credit hours will be required upon arrival on campus to take the Compass Test for academic placement purposes.

   • Health and accident insurance: All F and J international students and exchange visitors are required to purchase health and accident insurance provided through UALR and maintain coverage year-round.
   • Complete the TB screening , unless exempt. Complete other immunization requirements unless processed before arrival.
   • Provide a copy of the visa, passport, I-94 card, and I-20 to OIS.
   • Attend the mandatory International Student Orientation.

International Student Orientation and Check-in

Newly admitted international students with an initial I-20 or DS-2019 must attend the mandatory orientation and physically check-in with OIS located in Education 101 to provide copies of all current visa documents. All international students must check-in with the OIS before the 11th day of each Spring and Fall semester. Check-in schedule and procedures will be posted on the OIS website at the beginning of each semester.

Maintaining F/J Student Status

To maintain your student status, you need to:

   • Have a valid I-20/DS-2019. I-20s and DS-2019s have expiration dates, which can be found in item 5 on the I-20 and Item 3 on the DS-2019. If your I-20 or DS-2019 is going to expire before you finish your program, consult the Office of International Services at least 30 days before the expiration date to discuss your options.
   • Be a full-time student – In order to maintain status, F-1 and J-1 students must be enrolled full-time for each fall and spring semester. Enrollment in summer sessions is not required, unless a student begins study at UALR in the summer or your final semester falls in the summer and you have no intend to register for the fall term.
   • Undergraduates – Full-time enrollment is at least 12 credit hours per semester. (Only 3 of these hours can be Web-based Online courses.)
   • Graduates – Full-time enrollment is 9 credit hours per semester. (Only 3 of these hours may be Web-based Online courses.)

**Students not in F or J visa status are exempt from the one course or three semester hours on-line or distance education restriction but may experience difficulties if they convert to a F-1 visa during the duration of an on-line or distance education program.

**Enrolling in an on-line or distance education program, even with a residency requirement, does NOT authorize entry into the U.S. The student is responsible for obtaining all documents required for entry into the U.S. prior to travel or, when required by the program, prior to admission to UALR.

Employment Information

U.S. immigration laws permit F/J international students who are enrolled full-time and in good academic standing in UALR undergraduate and graduate programs to work on campus up to 20 hours a week during the academic year and full-time during university breaks, including summer, winter, and spring break. However, prior employment authorization must be obtained from OIS.

Tuition and Fees (See the Tuition and Fees chart for non-resident costs.)

Cooperative Education

Cooperative Education is an academic program for students who would like to combine classroom study with academically related paid employment. The program allows students to complement classroom experience with employment related to their academic area of interest.

“Co-op” creates opportunities for students locally in business, government, industry, and social service agencies. Students who participate in co-op find themselves refining research methods, applying theories in actual field settings, working with advanced technology, and designing original projects and research, all while gaining experience, making money, and earning their degrees. Students interested in Cooperative Education should contact the Office of Cooperative Education at (501) 569-3584. For additional information, visit the Co-op website at http://ualr.edu/coopeduc/.
Educational and Student Services

The vice chancellor for educational and student services has the general responsibility for coordinating services to students. These services include admissions, academic advising, academic records, the UALR Bookstore, cooperative education, counseling and career planning, dining services, disability support services, fitness and aquatics, health services, housing, personal enrichment courses, intramural and recreational activities, orientation programs, registration, student activities, and testing services and student life research.

Adult Learners (Nontraditional Students)

Adult learner is defined as a student 25 years of age or older who is beginning or returning to school after being away from college for a number of years and who plans to enroll in credit courses. To respond more effectively to this group’s needs, the Office of Campus Life serves as an advocacy and referral office and assists new adult students.

Support for adult learners includes help with questions, peer support, and opportunities to enhance a positive sense of self. Special interest sessions for adult learners are also provided, and advising is offered to organizations targeting adult learners. For more information about these services and programs, contact the Office of Campus Life.

Alumni Association

The UALR Alumni Association sponsors a variety of activities for students and former students including homecoming, reunions, speaker series, and other special events. The association offers several scholarships, including one to a second-generation student, and it cosponsors GradFest each fall and spring semester. Members receive on-campus discounts and receive Alumnus, the publication of the Alumni Association. The Alumni Association offers a basic membership option or membership in a specific constituency group, and is open to all former students of UALR and its predecessor institutions (Little Rock University and Little Rock Junior College) for a small annual membership fee.

Bookstore

The UALR Bookstore is located in the Donaghey Student Center complex and is the book center for the campus community. In addition to providing required and recommended textbooks, the Bookstore has a general book department with a basic selection of books, special promotions, school and office supplies, and a special order service. The gift department includes jewelry, imprinted clothing, and greeting cards. University class rings are ordered individually for graduating students. The Bookstore is managed by Barnes and Noble Bookstores, Inc., and is a member of the National Association of College Stores and the Southwest College Bookstore Association.

Campus ID Card

The UALR photo Campus Card is required to access the Donaghey Student Center Fitness and Aquatics Center, library, athletic events, and special activities, and to perform check cashing and enrollment adjustments. The ID Card is also used as a debit card for those receiving book vouchers. The card may not be used by any person other than the one to whom it is issued, and it must be surrendered on the request of any official of the University. If an ID card is lost, another can be obtained at the Donaghey Student Center for a fee. Campus Cards are issued at the Donaghey Student Center during regular operating hours.

Office of Campus Life

The professional staff members in the Office of Campus Life are dedicated to the development of the whole student, believing that the best way to educate people is to integrate fully all objectives of learning.

The Office of Campus Life has primary responsibility for the following:

• New student orientation and programs
• Advocacy programs for women, adults, and minorities
• Campus celebrations
• Social Greek life advisement
• Registration and advisement of student organizations
• Allocation and administration of the student activity fee
• Peer tutoring services
• Administrative support for registered student organizations

For more information regarding the above programs and services, contact the Office of Campus Life.

Counseling and Career Planning Services

UALR’s Office of Counseling and Career Planning offers assistance in personal counseling, career and educational planning, and the job search. Individual appointments with a counselor are available to facilitate progress toward life goals and to help overcome problems. The office also has many tools to help students in their career goals, from interest finders and occupational information to job listings. All students are invited to visit the office in Ross Hall 417 to take advantage of the many resources it offers. For all additional assistance and information, please visit UALR’s Counseling and Career Planning web site at http://ualr.edu/ccps_dept/.
Disability Resource Center

It is the policy of UALR to accommodate students with disabilities including, but not limited to, physical, sensory, learning, psychiatric, and medical disabilities, pursuant to federal and state law. Any such student who needs accommodation, for example in seating placement, or in arrangements for note-taking, examinations, or access to information on the web, should inform the instructor at the beginning of the course. The chair of the department offering the course is also available to assist with accommodations.

Other services available to students with disabilities include specialized orientation to the campus, assistance with course registration, assistance with class schedule preparation, special parking permits (visit Health Services), reader and interpreter services, adaptive equipment, and disability-related counseling. Disability Resource Center also facilitates classroom and testing modifications provided by faculty.

Disability Support Services currently has two U.S. Department of Education grant-funded programs. Project PEC is funded through a contract with the Postsecondary Education Consortium at the University of Tennessee. Funds have been used for development of model programs as well as outreach to the state in the area of serving students who are deaf or hard of hearing. Project PACE focuses on providing information and training to faculty and administrators on how best to teach students with disabilities. To reach Project PACE, call (501) 569-8410.

For more information, contact Disability Resource Center by visiting http://ualr.edu/disability/ or call (501) 569-3143. The office is located in the Donaghey Student Center, Room 103.

Donaghey Student Center

The 180,000 square foot multifunction Donaghey Student Center complex is guided by a three-part mission: to establish a climate that nurtures personal wellness and encourages individuals to be positive contributors to society; to support the mission of the University by providing a diversity of facilities, programs, and services to enhance the educational environment and improve the quality of college life; and to be a place of convergence that provides a sense of campus community and linkage to the University’s public.

The Donaghey Student Center houses the Bookstore, dining services, the Office of Educational and Student Services, intramural-recreational services, Disability Support Services, Health Services, Leisure Science, Campus Life, and the facility’s administrative offices. There are also offices for the Student Government Association, UALR Forum, University Program Council, and over 40 student organizations.

The contemporary complex features full dining services, catering and conference facilities and services, meeting and banquet rooms, a food court with national franchises, a TV lounge, cyber cafe, and other facilities and conveniences to serve the needs of the campus community. The fitness and aquatics section of the Donaghey Student Center showcases an Olympic-sized pool; a one-eighth mile running track; steam rooms and saunas; exercise bikes; basketball, volleyball, wallyball and racquetball courts; a one-eighth mile running track; steam rooms and saunas; and more.

Students, faculty, and staff may access these facilities with a valid Campus Card (student ID). Family members may also join for a nominal fee. A variety of sports equipment, e.g., basketballs and racquets, are available at no charge at the equipment services counter. Locker and towel service is available at a nominal fee.

Many programs are available, including fitness, aquatic, intramural sports, and leisure and wellness activities. Services include land and water aerobic classes, strength training and conditioning assistance, fitness screenings, weight control seminars, and intramural tournaments in basketball, volleyball, golf, and more.

The Donaghey Student Center is professionally affiliated with the National Association of College Auxiliary Services, the Association of College Unions-International, and the National Intramural-Recreational Sports Association. For more information about the facilities and services call (501) 569-3362 or visit http://ualr.edu/dsc/.

Graduate Student Association

The Graduate Student Association (GSA) provides assistance and support for new and continuing graduate students, offers leadership and organizing experiences and opportunities for creative interaction between students in different programs, and aids the Graduate School in addressing the needs and issues of its students.

Each spring, GSA participates in the Research Expo at which students present scholarly posters to the University community. GSA elects and appoints students to committees that perform various services for the student body, such as advising the library on student needs. The association is an affiliate of the National Association of Graduate and Professional Students.

GSA takes an active part in campus life and provides social, academic, and policy interaction among students and faculty. All graduate students, full-time or part-time, are automatically members and are encouraged to participate. For more information, ask in the Graduate School office or call (501) 569-8659.

Greek Organizations

UALR has a wide variety of Greek social fraternities and sororities, as well as honor and recognition societies and professional fraternities. These traditional college student organizations (called Greek organizations because of their Greek names) provide democratic, social, and leadership experience; give value beyond the college years; create an ever-widening circle of service beyond membership; answer the yearning for spiritual expression and guidance; and fill the need to belong. Membership is by invitation, following a formal “rush week” during which each sorority and fraternity holds parties for potential members to learn about the organizations. For more information or to participate in rush week, call the Office of Campus Life, (501) 569-3308.

Health and Accident Insurance

Students are responsible for their own health and accident coverage while enrolled at UALR. An optional student group health insurance plan is offered to UALR students, their spouses, and dependent children. Information and applications are available in the Office of Health Services. Students must apply for this health insurance plan within 30 days of the first day of class for the fall term or may enroll at the beginning of the spring semester on a prorated basis for eight months. Insurance is mandatory for international students.

Health Services

The Office of Health Services is located in the Donaghey Student Center and is staffed by nurses Monday through Friday (the Department of Public Safety will respond to an emergency 24 hours a day). Readily accessible health information, screening programs, immunizations, assessment and medication for common illnesses, first aid, and medical referrals are provided to enable students to take full advantage of academic opportunities.

Health service programs are free and available to all students. However, students may be referred to a physician or local health care facility for definitive care and are responsible for these medical expenses. Staff can provide follow-up care such as blood pressure checks, dressing changes, and weight management information.

Physical examinations are not required of UALR students, but proof of immunization for measles and rubella is required of all applicants born after January 1, 1957. Students with medical problems or physical disabilities are encouraged to fill out a brief information card at the Office of Health Services by the end of the first week of classes. All patient information is confidential.
Housing

The University offers a variety of housing services coordinated by the Office of Student Housing. Services include a residence hall, University-owned houses and apartments, and housing and roommate referral.

The residence hall houses 306 students, with controlled security-card access and a 24-hour staffed reception desk. Each two-bedroom suite accommodates four students and includes a bath and kitchenette. Cable television service and computer access is provided in every student room. Telephone service is available in every student room for a nominal fee. The hall provides a computer lab, study and television lounges, recreation room, mail service, and laundry and vending machines.

UALR owns a limited number of apartments and houses that are available to students, faculty, and staff. These accommodations are unfurnished, of various sizes and types, and within walking distance of the campus.

The office maintains a list of persons seeking roommates and of apartments, townhouses, duplexes, rooms, and mobile homes available in greater Little Rock, as well as apartment guides, commercial and private listings, brochures, and other information. All rental arrangements on privately owned accommodations are between the renter and tenant.

UALR adheres to all federal and state regulations and guidelines regarding nondiscrimination in housing. Inquiries may be made to the Office of Student Housing at (501) 569-1743.

Information Center

The Information Center is located in the Donaghey Student Center. The Center keeps a list of office locations for faculty, departments, and colleges and maintains a master calendar of campus activities. Students can request meeting rooms on forms available at the center. Facility reservation forms are also available from the University’s Central Stores. The Information Center’s telephone number is (501) 569-3362.

Intercollegiate Athletics

The UALR athletic program is a member of the National Collegiate Athletic Association Division I and abides by NCAA rules and regulations. Men’s and women’s teams compete in the Sun Belt Conference. Men’s sports include baseball, basketball, cross country, tennis, and water polo. Women’s sports include basketball, cross country, soccer, swimming, tennis, track, and volleyball. Any student interested in intercollegiate sports participation is encouraged to try out. Interested students should contact the director of athletics.

The Office of International Services

This office is responsible for foreign student orientation, assists international students regarding living and studying on an American campus, assists with housing, provides advisory services for matters involving nonacademic concerns, and helps develop programs to bring foreign and U.S. students together. The office works in cooperation with other units on campus that serve international students. For more information, phone (501) 569-3582.

Intramural-Recreation Services

Intramural-recreation services are offered by the Donaghey Student Center. Services offered include open recreation, fitness, aquatics, intramural sports, outdoor recreation, instructional sports, and club sports.

Intramural sports programs include flag football, swimming, volleyball, basketball, tennis, golf, table tennis, and more. There are also workshops to assist students in sharpening their skills in some sports and other leisure pursuits. These include land and water aerobic classes, swimming lessons, and special fitness events. Students may also get a fitness assessment and guidance from the fitness and wellness staff. Strength training and conditioning assistance is always available in the weight room. This office also serves the facility and programming needs of recognized student organizations that are sports or recreation related. For more information call (501) 569-8284.

Ottenheimer Library

The library plays a key role in every student's education. Students are urged to visit the library early and often in their academic careers. The library staff provides a number of reader’s services, including information about the automated card catalog, special collections, reference materials, and internet resources.

The UALR Ottenheimer Library is an open-stack library, which means patrons may select the book they want instead of waiting for a staff member to retrieve it. However, that puts a special obligation on users to act responsibly by not taking more than they need and by not taking books without checking them out.

Ottenheimer Library meets a variety of student, faculty, and general public needs. Over 2,300 people use the library on an average day. The library’s staff provides circulation services, access to assigned readings in the Baum Reserve Reading Room, interlibrary loans, and reference assistance. Reference librarians also conduct course-specific instruction sessions and assist students accessing information through the library’s online catalog, in-house databases, and the internet.

The library holds more than 480,000 volumes, subscribes to about 2,000 periodicals, and has access to more than 20,000 electronic journals. The library also subscribes to more than 100 electronic databases. In addition, it houses a microform inventory of nearly one million items along with over 10,000 phonograph albums, audio books, and music compact disks. As a selective depository for federal documents, the library receives about 30 percent of the items offered by the Government Printing Office in Washington, D.C. Ottenheimer Library is the state’s only depository of European Union documents and also collects Arkansas state documents. Overall, the library contains more than 300,000 government documents. The Archives and Special Collections Department highlights materials specific to UALR, Arkansas, and the lower Mississippi Valley.

Individual study carrels and self-service photocopiers are available for faculty and student use. Along with microfilm reader-printers, the Instructional Media Services area provides equipment for visually-impaired students. This includes a Braille dictionary, close-captioned television, and a ReadingEdge machine. Instructional Media Services supplies equipment and video programs directly to classroom faculty while serving the larger campus community through teleconference down-links.

Ottenheimer Library subscribes and contributes to the Online Computer Library Center (OCLC) and is a founding member of its regional AMIGOS network. In addition to providing authoritative cataloging data, these services allow UALR faculty and students prompt interlibrary loan access to the millions of items held by other member libraries. The library also participates in direct-to-user reciprocal borrowing with the nine other University of Arkansas System libraries.

The library is open 87 hours a week when classes are in session; the schedule expands during final exam week. The building is open to the public and all collections are available for in-house use. Library hours in the fall and spring semesters are 7:45 a.m. to 10:45 p.m. Monday through Thursday, 7:45 a.m. to 4:45 p.m. Friday and Saturday, and 1:00 p.m. to 9:45 p.m. Sunday. Summer hours are 7:45 a.m. to 9:15 p.m. Monday through Thursday, 7:45 a.m. to 4:45 p.m. Friday, 9:00 a.m. to 12:45 p.m. Saturday, and 1:00 p.m. to 6:45 p.m. Sunday. Hours vary during holiday and semester breaks.
General information is available by calling (501) 569-3123. The telephone number for reference and documents assistance is (501) 569-8806.

Library Archives and Special Collections

The Ottenheimer Library’s Archives and Special Collections Department, located on the second floor of the Library, houses materials on Arkansas and the lower Mississippi Valley. The department contains more than 5.5 million items of archival or manuscript material; 16,250 books; 4,500 pamphlets, posters, and similar materials; 25,000 photographs and postcards; a variety of memorabilia; and the library’s non-circulating book collection.

Public Safety

The UALR Department of Public Safety (DPS) is responsible for maintaining an orderly, safe environment for the pursuit of education, and it works in many ways to serve, protect, and assist the students, faculty, staff, and their guests. Police service is provided 24 hours a day, seven days a week, and University police officers are commissioned law enforcement officers with the same authority and arrest powers as city police officers. The public safety telephone number is (501) 569-3408; (501) 569-3400 for emergencies.

Public Safety provides parking and traffic control, individual assistance, crowd control at campus events, crime control, and crime prevention information. Brochures listing traffic, parking, bicycle, pet, and other regulations are available in the public safety office, and these regulations are detailed in the UALR Student Handbook. University police officers are there to help, but students are responsible for knowing and obeying University regulations.

The department should be notified immediately in the event of theft, assault, public drunkenness or other disturbances, or any other criminal, dangerous, or suspicious activity. The Student Patrol, trained students equipped with radios, flashlights, and identifying caps and badges, regularly patrol the campus buildings and parking lots and are available on request as escorts to on-campus destinations.

Emergency telephones, direct lines to the public safety dispatcher, are located around campus and their use is encouraged. These phones are in small, gray metal boxes on poles topped with flashing blue lights. Simply pick up the receiver and wait for the dispatcher to answer.

UALR is in compliance with federal law requiring disclosure of statistics regarding arrests and certain crimes.

Share America Program

The Share America Program at UALR was established in 1994 and provides more than 1700 children in the Little Rock Public Schools with educational enrichment, health care, family assistance, and special gifts. The program, which was the first Share America site in the United States, was established by a grant from Children International, a Kansas City-based child sponsorship organization. Share America serves as a learning laboratory for UALR students who volunteer for one-time service projects or serve as mentors and tutors. Share America welcomes the opportunity to arrange internships and course credit for students involved in special projects.

Speech, Language, and Hearing Clinic

This program provides evaluations and therapy for any student wishing assistance. The UALR Speech, Language, and Hearing Clinic is accredited in speech-language pathology and audiology and is supervised by certified speech-language pathologists and audiologists. Self, faculty, and external referrals may be made. Evaluations and therapy are scheduled at the faculty member’s and student’s convenience. The clinic is located in the University Plaza. Appointments may be scheduled by calling (501) 569-3155.

This clinic has the only diagnostic and rehabilitative training program in audiology in Arkansas. Audiological services include testing of hearing and communication skills, monitoring of hearing problems, hearing aid evaluations, hearing aid checks, training in speech reading, and counseling services for hearing-impaired students who may be experiencing difficulty in school because of hearing problems.

Speech and language services include evaluations and therapy in disorders of articulation, language, stuttering and cluttering, voice, and organic disorders such as laryngectomy, aphasia, cerebral palsy, and cleft palate.

Some services are available at a reduced charge to regularly enrolled students. In addition, referrals are encouraged from community speech- and hearing-impaired children and adults.

Student Activities

The Office of Campus Life provides advisement to all registered student organizations including those funded by the activity fee, coordinates the assignment of student organization office space, and provides student development and leadership enhancement opportunities for UALR students. The office encourages a diversity of activities designed to entertain and educate while providing opportunities for student development through extracurricular experiences.

The Office of Campus Life is responsible for the fair and equitable allocation of the student activity fee, as well as for monitoring the expenditure and usage of the fee. The office develops and maintains the criteria and policies for the student activity fee allocation process.

Student Conduct

Student rights, responsibilities, and behavior as well as other information on matters of conduct and due process are described in the UALR Student Handbook. This publication is given to students at orientation or may be obtained from the Office of Educational and Student Services. Students are considered to be mature individuals who neither lose the rights nor escape the responsibilities of citizenship through enrollment at UALR.

Student Directory

Directory information is public information and is open to the public. This information may be given without student consent. UALR’s handling of directory information is in compliance with the Family Educational Rights and Privacy Act of 1974 (commonly known as FERPA). Directory information includes:

- Student’s name
- Addresses (including e-mail)
- Telephone number
- Date and place of birth
- Major field of study
- Class rank
- Number of hours in which enrolled and number of completed
- Parents’ and spouses’ 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
- Previously attended high schools, colleges, or universities

Currently enrolled students may request that directory information be withheld from all but government and lending agencies by completing the Request to Prevent Release of Directory Information form. The form can be mailed, faxed or brought to the Office of Records and Registration (located in the Student Services Center, 2nd floor). It will remain in effect until it is revoked, in writing, by the student.
Student Government Association

The UALR Student Government Association (SGA) offers an opportunity for students to play an active role in the University’s affairs and provides information on campus policies, events, and organizations, and an avenue for students to make known their feelings about campus policies. SGA officers are selected by campus-wide election and represent the student body in the UALR University Assembly.

The association appoints student members to UALR’s administrative and standing committees, provides an appeal system for parking and traffic violation tickets, maintains open lines of communication between University policy makers and students, and provides meeting space for student organizations.

For more information or to become involved with the student government, call (501) 569-3210.

Student Organizations

There are more than 100 student organizations and clubs registered at UALR. These groups offer opportunities for leadership and student development experiences; recognize scholarship and leadership achievements at either the undergraduate or graduate level; and provide social experiences and opportunities to promote common interests in such areas as social action, politics, religion, philosophy, ethics, recreation, and hobbies. For a complete list of registered student organizations, or to register a student organization, contact the Office of Campus Life. Student Publications

UALR recognizes two official student publications on campus. The Forum is the student newspaper. It is published weekly during the fall and spring semesters and four times during the summer. The Equinox is a student literary magazine, published annually.

Testing Services

Brad Patterson, Assistant Vice Chancellor
Student Services Center, (501) 569-3198, Room 315
http://ualr.edu/testing

The Office of Testing Services and Student Life Research makes available assessment programs to provide information that assists students in educational and career planning, as well as personal decision making.

Information on national programs required for admission to graduate or professional schools is available, including the Graduate Management Admission Test, Graduate Record Examination, Law School Admission Test, Medical College Admission Test, Miller Analogies Test, Praxis series, Optometry Admission Test, and Test of English as a Foreign Language (TOEFL). In addition, the office administers a number of examinations for licensing and certification boards. Examinations are administered according to national schedules that require candidates to register with the appropriate national testing service according to fixed deadline dates. Information bulletins that include test dates and applications are available at the Office of Testing Services and Student Life Research, the Graduate School, and the Information Center. For more information call (501) 569-3198.

Computerized administrations of standardized tests are given at Pro-Metric Center in Little Rock, (501) 663-8341.

University Program Council

The University Program Council (UPC) offers students an opportunity to choose, organize, and produce entertainment events and other activities for the campus community. UPC presents concerts, comedians, lectures, movies, and other events several times a month, all planned and produced by student members. Because UPC cosponsors events with other UALR organizations, members have the opportunity to interact with many diverse campus groups.

In addition to activity programming experience, UPC members receive leadership development and networking opportunities at regional conferences. For more information, see http://ualr.edu/upc.

University Writing Center, Communication Skills Center, and Mathematics Assistance Centers

The University Writing Center offers writing assistance to any student at any level. Word processing is also available. Located in Student Union B 116, the University Writing Center is open six days a week. Hours change each semester. For more information, come by or call (501) 569-8343. You may also visit the Center for help with writing at the University Writing Center Online: http://ualr.edu/owl/.

At the Communication Skill Center (CSC), students can receive help with a variety of communication-related skills, such as managing anxiety, presentation organization, effective delivery, and appropriate presentational aids. The CSC is a friendly environment located in SPCH 201. Graduate Assistants are responsible for managing the CSC. Undergraduate interns have been recommended by Speech Communication faculty, have undergone thorough training, and participate in weekly staff meetings. Additionally, the interns earn academic credit for the completion of a reflective portfolio and weekly service in the CSC.

The Mathematics Assistance Centers (MAC I & II) are excellent places for students to study and do their homework. No appointment is necessary and the MAC I and MAC II are free to all UALR students. Each MAC is an excellent place to get help. Tutoring, DVDs and computers are available.

Vehicle Registration and Parking

Every student who owns or operates a motorized vehicle on the campus is required to register that vehicle and display a parking permit as instructed. A student may register one vehicle on the campus is required to register that vehicle and display a parking permit as instructed. A student may register one vehicle on the campus is required to register that vehicle and display a parking permit as instructed.
INTENSIVE ENGLISH LANGUAGE PROGRAM (IELP)

Alan Lytle, Director
Stabler Hall, Room 301, (501) 569-3468, http://ualr.edu/ielp/

The Intensive English Language Program (IELP), in the College of Arts, Humanities and Social Sciences, offers non-English speakers a full-time program in English language skills: speaking, listening, reading, and writing. IELP courses are listed in the Department of International and Second Language Studies. After completing IELP, students with the necessary academic qualifications may be admitted to UALR without taking the Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE), or the Michigan test.

Conditional admission to UALR may be granted to IELP students with acceptable secondary school, college, or university grades. IELP provides language training as well as cultural and academic orientation programs for the following students:

- International undergraduate or graduate students applying for admission to a U.S. college or university who must first improve their language skills.
- International undergraduate or graduate students who have been admitted to UALR but require further language preparation.
- Community residents who want to improve their English language skills for personal or professional purposes.

IELP Objectives

- To help students improve the speaking, listening, reading, and writing skills that will enable them to successfully undertake work in regular university classes.
- To enable students to participate actively in most conversational situations.
- To introduce students to American culture in terms of a typical U.S. campus and community.
- To foster international and intercultural awareness and understanding.

Eligibility

Only students who are 17 years of age or older are eligible for admission to IELP. No prior knowledge of English is necessary. Foreign students must provide documentation to establish their ability to support themselves while in the U.S.

English as a Second Language (ESL)

Credit and non-credit courses in ESL are offered during the fall, spring, and summer sessions. Intensive English classes focus on preparation for university study. Placement testing for the three-level intensive English program is held at the beginning of each semester. Testing is also available for international students who require language clearance before registering for UALR classes. Students receive English instruction at the appropriate level of difficulty.

- Placement: Upon arrival, students are placed in the appropriate level on the basis of diagnostic tests.
- Levels: The IELP offers three levels of instruction: Foundations, Intermediate, and Pre-university/TOEFL.
- Classes: Each student has at least 20 hours of instruction per week; every student works to acquire grammar, pronunciation, culture, reading, writing, listening, speaking, and study skills. TOEFL preparation is offered at the highest level.
- Time frame: There are three semesters of instruction each year; each term is approximately fifteen weeks in length. Students may progress from foundations to the pre-university/TOEFL level in one year. However, determination and diligence determine how quickly an individual advances to the next level.

Visa Requirements

Every IELP student must follow standard U.S. Immigration and Naturalization Service procedures for entry into the U.S. A student planning to study in the U.S. must obtain an F-1 visa. UALR is authorized to issue a Certificate of Student Eligibility (I-20) to eligible students. Students with the F-1 visa must remain full-time students to maintain F-1 status.

Application and Admission

The student should initiate the application process at least three months before planning to enter UALR. To apply:

- Complete and submit the IELP application form.
- Submit supporting financial data (data must be verified by a bank stamp or the local U.S. Embassy or Consulate).
- Send a U.S. $100 bank draft or money order as a nonrefundable application fee. An I-20 will be sent to qualified applicants. Please allow one month for return.

Tuition

Students should contact the IELP for up-to-date information on costs for tuition, housing and food, books, medical insurance, and other fees.

Working While at IELP

IELP Students are not allowed to work while they are studying at IELP. Once an IELP student graduates from the program, he/she might be able to work on campus, but the student must obtain prior approval from the Office of International Services (Education Building, Room 101).
The University provides opportunities for interdisciplinary study, combining aspects of several academic disciplines that may be affiliated with more than one department or college. These include baccalaureate and associate degrees, minors, and individual courses.

**Interdisciplinary Degree Programs**
For more information about the programs below, students should consult the listings appearing under the appropriate department or college in this catalog.

<table>
<thead>
<tr>
<th>College of Arts, Humanities, and Social Sciences</th>
<th>Donaghey College of Engineering and Information Technology Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Studies</td>
<td>Construction Management</td>
</tr>
<tr>
<td>Second Language Studies</td>
<td></td>
</tr>
<tr>
<td>Liberal Arts (Studies)</td>
<td></td>
</tr>
<tr>
<td>College of Business</td>
<td>University College</td>
</tr>
<tr>
<td>Interdisciplinary Business Studies</td>
<td>Associate of Arts in General Studies</td>
</tr>
<tr>
<td>International Business Program</td>
<td></td>
</tr>
</tbody>
</table>

**Interdisciplinary Minors**
For more information about the minors below, students should consult the listings appearing under the appropriate department or college in this catalog.

<table>
<thead>
<tr>
<th>College of Arts, Humanities, and Social Sciences</th>
<th>Donaghey College of Engineering and Information Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonprofit Leadership Studies</td>
<td>Bioinformatics</td>
</tr>
<tr>
<td>Gender Studies</td>
<td>Information Technology Minor</td>
</tr>
<tr>
<td>International Studies</td>
<td>Information Assurance</td>
</tr>
<tr>
<td>Legal Studies</td>
<td></td>
</tr>
<tr>
<td>Urban Studies</td>
<td></td>
</tr>
<tr>
<td>International and Second Language Studies</td>
<td></td>
</tr>
<tr>
<td>College of Professional Studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human Services</td>
</tr>
</tbody>
</table>

**Prelaw Studies**
Students interested in pursuing a legal career through law school after completion of the bachelor’s degree should get the most from their undergraduate education. Law school admission committees are usually impressed by applicants who can convincingly demonstrate that they have challenged their thinking and reasoning skills in a variety of courses. Law schools prefer students who can think, read, and write well, and who have some understanding of what shapes human experience.

Unlike the premedical curriculum, which contains some specific, mandatory courses, there is no recommended set of prelaw courses. Law schools prefer that you reserve your legal study for law school and fill your undergraduate curriculum with broad, diverse, and challenging courses. Courses that introduce you to broad legal principles may present you with enough information to decide whether or not you want to continue with a legal education, but they are rarely taught with the depth and rigor as actual law school courses. UALR also offers a legal studies minor for a general understanding of law and legal institutions, but it is not a required minor for law school admission. See the “Legal Studies” section in the political science department, or contact the coordinator, Joseph Giammo, at (501) 569-3331.

**Pre-professional Studies in the College of Science and Mathematics**
The College of Science and Mathematics offers students pre-professional curricula for professional areas requiring a background in science or technology as well as in liberal arts. The associate dean and the college’s Premedical Advisory Committee advise students preparing to enter such programs. Advisement in the other pre-professional areas is available through the associate dean’s office in Engineering Technology and Applied Sciences (ETAS) 125.

**Individual Interdisciplinary Courses (IDST)**
The content of each of these courses changes with each offering. Interested students should consult the list of current course offerings for the title, description, and teachers of each course. More information can be obtained from one of the instructors listed.

In general, interdisciplinary courses address a theme or a problem from the viewpoints of several academic disciplines or a subject that does not fall within one of those disciplines. These courses are often supervised by more than one teacher. Courses include:
- IDST 1100, 1200, 1300, 2100, 2200, 2300, 3100, 3200, 3300, 4100, 4200, 4300

Each interdisciplinary studies course carries a number and title indicating that course’s level, credit hours, and subject, such as IDST 3312 The Humanities and Technology. All such courses apply as credit hours toward the total needed for graduation and as elective hours. Their applicability toward a major or minor is determined by the department, college, or school of the student’s major or minor field.
Donaghey Scholars Program
C. Earl Ramsey, Director

The Donaghey Scholars Program is UALR’s University-wide honors program. Its interdisciplinary curriculum promotes critical thinking and active learning. Scholars classes demand wide reading and extensive writing and lead to vigorous discussions and frequent independent study.

The Donaghey Scholars admissions process uses academic records, test scores, written essays, recommendations, and personal interviews to determine whether the student would benefit from admission to the program. Since space in the program is limited to a total of 100 students, admission is highly competitive. Each year’s class is composed of incoming college freshmen, students transferring from other colleges, and UALR students who have been referred to the program by faculty members. Both traditional and nontraditional students are in the Scholars Program.

Students who are admitted to the program are granted a scholarship equal to the full in-state tuition, a stipend (currently $2,250, $3,500, or $5,000 per semester), and a generous subsidy applied toward study abroad. Scholars who perform satisfactorily are assured of up to eight semesters of support.

Scholars classes are small, making it possible for faculty to get to know students and their interests. Informal advising is frequent. Formal advising in the Scholars Program is handled by the Director for all Scholars who have not declared a major. Because the Scholars Program has requirements spread over four years, the Director remains informed of the Scholar’s progress in meeting these requirements, even when formal advising has been transferred to the department of the Scholar’s major area of study.

The Scholars Program has a specially designed interdisciplinary curriculum, which replaces the University’s core curriculum requirements.

Students admitted to the Donaghey Scholars Program who meet all of the requirements of the Program, as well as all of the requirements in their major and minor fields, graduate as Donaghey Scholars.

Scholars Program Requirements

Scholars Core Courses:
- SCHL 1101, 1102 Scholars Colloquium I and II
- SCHL 1300, 1301 Rhetoric and Communication I and II
- SCHL 1320, 1321 Science and Society I and II
- SCHL 2310, 2311 Individual and Society I and II
- SCHL 3310, 3311 Individual and the Creative Arts I and II
- SCHL 2300, 2301, 3300 History of Ideas I, II, and III

Other Requirements:
- One seminar outside the student’s primary field
- Fulfillment of the University’s core curriculum mathematics requirement
- US History or American National Government
- A lab science course
- Successful completion of an oral proficiency examination in a second language
- Study abroad in an approved program
- Final project
- Exit interview
- A course in the history of civilization, though not required, is strongly recommended
Students interested in teaching in secondary education in Arkansas must be licensed by the state in a state-approved subject area. UALR programs in secondary teacher education are designed to prepare students for licensure. Candidates for licensure must pass examinations mandated by the state, be U.S. citizens, and pass a criminal background check and a tuberculosis skin test.

### Secondary Teacher Licensure Areas

| Art Education | Physical Education, Wellness, Leisure |
| English and Language Arts Education | Mathematics Education |
| Foreign Language Education (French, German, or Spanish) | Physical Science / Earth Science Education |
| Vocal Music Education | Life Science / Earth Science Education |
| Social Studies Education (History or Political Science) | |

All secondary education programs have several components: university core requirements, an 18-hour Secondary Education Minor, and a major in a content area (such as Art, English, Math, or Biology, etc.). Some programs also require additional courses, blocks of courses, or other special minors related to the licensure area. Programs in which a Bachelor of Arts degree is awarded include a second language proficiency requirement. See “Second Language Requirement” in the Degree Requirements Section.

All students must have a minimum of 124 hours (including 45 hours of upper-level courses) to graduate. Because these requirements often overlap and are complicated in other ways, early and careful planning is necessary to complete the programs in four years. Students are encouraged to contact a faculty advisor in their area of interest as early as possible after acceptance to UALR. The components of the secondary education programs are described below. Course descriptions, numbers, and titles are found in the catalog sections for the departments offering the courses.

### University Core Requirements

A student seeking a baccalaureate degree must complete a total of 44 hours in core courses. Options within the core may be restricted by the content majors, associated blocks of courses, or special minors in some licensure areas. A student should consult the requirements of his or her licensure area before selecting core courses.

### Retention

Once admitted, students are required to maintain a 2.65 grade point average, with at least a “C” in all professional courses (this includes all courses associated with the licensure/degree plan). In addition, students’ professional behaviors, content knowledge, and classroom performance will be evaluated throughout the program.

Successful completion of the licensure program is not based solely on the number of course credits, but requires demonstration of specified professional knowledge, skills, and behaviors.

Once the student has begun the program, periodic evaluations will assess progress. Failure to progress satisfactorily might result in a student being removed from the program. While a student may require additional time to meet some performance expectations, the faculty may limit that time and reserves the right to drop a student from the licensure program should appropriate progress not be demonstrated.

### UALRTeach

This innovative teacher preparation program offers students seeking math or science degrees the opportunity to also earn a teaching license. Students receive early field experience and learn from mentor teachers while still pursuing their core degree. UALRTeach allows students to explore teaching as a career at no cost. Both of the one-credit courses below are available to UALR students who are thinking of majoring in science or math.

UALR Teach all starts with in the fall, SCED/IGSC 1101 Inquiry Approaches to Teaching (Step 1). The class focuses on hands-on and inquiry-based lessons. SCED/IGSC 1102 Inquiry-Based Lesson Design (Step 2) is offered in the spring. Students will continue developing lesson-planning skills learned in Step 1 but also become familiar with exemplary middle school science curricula.

### Minor in Secondary Education (18 Hours)

<table>
<thead>
<tr>
<th>Praxis Exams:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Praxis I: Reading, Writing, and Mathematics</td>
</tr>
<tr>
<td>Praxis II: Principles of Learning and Teaching 7-12</td>
</tr>
<tr>
<td>Praxis II: All Content exams (listed on the following pages for each licensure area)</td>
</tr>
</tbody>
</table>

The Secondary Education Minor is required in all programs and should not be confused with other blocks of courses or special minors required in some licensure areas.

### Block I: Career Awareness Semester

**Admission Requirements:** 2.65 GPA; Completion of 60 hours; Completion of the following core courses with a grade of C or greater:

<table>
<thead>
<tr>
<th>MATH 1302 OR 1315, RHET 1311 AND 1312, SPCH 1300</th>
</tr>
</thead>
</table>

Passing scores on the Praxis I exam (current pass scores, but subject to change):

<table>
<thead>
<tr>
<th>Reading 172 or above, Writing 173 or above, Mathematics 171 or above</th>
</tr>
</thead>
</table>

**Block I Course Requirements:** (3 hours)

| SCED 3210 Instructional Skills and Assessment |
| SCED 3110 Instructional Skills Practicum |

**Block II: Mastery of Principles of Learning and Teaching**

**Admission Requirements:** 2.65 GPA; a grade of C or greater in all Block I courses.
Block II Course Requirements: (6 hours)
- SCED 4321 Teaching Diverse Adolescents
- SCED 4122 Adolescent Diversity Practicum
- SCED 4123 Adolescents with Special Needs
- SCED 4124 Classroom Management

Block III: Student Teaching
Admission Requirements: 2.65 GPA; a grade of C or greater in all Block II Classes; Passing scores on Praxis II Content Exams.

Block III Course Requirements: (9 hours)
- TCED 4600 Student Teaching
- SCED 4330 Reflective Teaching
Content Components (See Individual Content Components on the pages that follow)

Minor in Secondary Education (18 hours) Fast-Track option

Fast-Track Option:
Prior to admission to complete Block I and Block II simultaneously, known as Fast Tracking, students must meet all of the following requirements:
- Admission requirements for Block I and II, with the exception that Block I and Block II coursework will be completed simultaneously, instead of Block I coursework as a prerequisite to Block II, including a “C” or greater in MATH 1302 or 1315, RHET 1311 and 1312, and SPCH 1300,
- Completion of a minimum of 80 hours prior to admission to the minor,
- GPA of 3.5 or above,
- Passing Praxis I and Praxis II (Content) scores,
- Completion of or concurrent enrollment in specialized instructional methods course prior to or concurrent with the semester of Fast Tracking,
- Writing sample that demonstrates writing competency evaluated by SCED faculty member and faculty content advisor, and
- Interview with SCED faculty and faculty content advisor with a favorable recommendation from both.

Core Requirements for Bachelor Degrees with Secondary Teacher Licensure

<table>
<thead>
<tr>
<th>ENGLISH/COMMUNICATIONS (9 HOURS)</th>
<th>Math (3 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHET 1311 Composition I</td>
<td>MATH 1315 College Mathematics (MATH 1321 Quantitative and Mathematical Reasoning-non-STEM majors)</td>
</tr>
<tr>
<td>RHET 1312 Composition II</td>
<td>MATH 1302 College Algebra</td>
</tr>
<tr>
<td>SPCH 1300 Speech Communication</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL SCIENCES (15 HOURS)</th>
<th>Science (8 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1311 History of Civilization I</td>
<td>ANTH 1415 Physical Anthropology</td>
</tr>
<tr>
<td>HIST 1312 History of Civilization II</td>
<td>ASTR 1301 Introduction to Astronomy</td>
</tr>
<tr>
<td>One course (3 hours) from the following:</td>
<td>and ASTR 1101 Introduction to Astronomy Laboratory</td>
</tr>
<tr>
<td>HIST 2311 U.S. History to 1877</td>
<td>BIOL 1400 Evolutionary and Environmental Biology</td>
</tr>
<tr>
<td>HIST 2312 U.S. History since 1877</td>
<td>BIOL 1401 Science of Biology</td>
</tr>
<tr>
<td>POLS 1310 American National Government</td>
<td>CHEM 1409 Chemistry and Society</td>
</tr>
<tr>
<td>Two courses (6 hours) from the following:</td>
<td>ERSC 1302 Physical Geology</td>
</tr>
<tr>
<td>ANTH 2316 Cultural Anthropology</td>
<td>and ERSC 1102 Physical Geology Laboratory</td>
</tr>
<tr>
<td>GNST 2300 Introduction to Gender Studies</td>
<td>ERSC 1303 Historical Geology</td>
</tr>
<tr>
<td>GEOG 2312 Cultural Geography</td>
<td>and ERSC 1103 Historical Geology Laboratory</td>
</tr>
<tr>
<td>PSYC 2300 Psychology and the Human Experience</td>
<td></td>
</tr>
<tr>
<td>RELS 2305 World Religions</td>
<td>Fine Arts/Humanities (9 hours)</td>
</tr>
<tr>
<td>MCOM 2330 Mass Media and Society</td>
<td>One course (3 hours) from the following:</td>
</tr>
<tr>
<td>SOCI 2300 Introduction to Sociology</td>
<td>ENGL 2337 World Literature</td>
</tr>
<tr>
<td>CRJU 2300 Introduction to Criminal Justice</td>
<td>ENGL 2338 World Literature Themes</td>
</tr>
<tr>
<td>ECON 2301 Survey of Economics</td>
<td>PHIL 2320 Ethics and Society</td>
</tr>
<tr>
<td>POLS 2301 Introduction to Political Science</td>
<td>Two of the following courses (6 hours):</td>
</tr>
</tbody>
</table>

Praxis Series Tests
Students in all programs must pass several standardized exams mandated by the State of Arkansas, The Praxis Series: Professional Assessments for Beginning Teachers, developed by Educational Testing Services, Inc. Successful completion of the Praxis I is required for admission to Block I of the Secondary Education Minor.
In order to complete the Secondary Education Minor, students must also pass the Praxis II pedagogy exam (Principles of Learning and Teaching) and all required Praxis II content exams within their licensure area. The content exams, listed on the following pages, are those required by the State of Arkansas at the time of publication of this catalog but are subject to change. Students who do not pass the exams are ineligible to graduate under a secondary education program degree plan with a minor in secondary education and are ineligible for teaching licensure. In such cases, students may qualify to graduate under another degree plan, although additional course work may be required.

- Students should consult an advisor in their licensure content area before registering to take exams.
- Students must submit completed “Praxis I and II” scores to the College of Education.

## Content Components

All programs require the completion of a major in the chosen field and in some cases require additional courses, blocks of courses, or other special minors. When the hours accumulated within a content area, taken together with university core hours, second language hours, and the 18 hours in the Secondary Education minor do not total 124 (of which at least 45 are upper-level), students must take additional general electives.

### LICENSURE AREA: ART

#### Praxis II Licensure Exams

- Art: Content Knowledge – 10135
- Principles of Learning and Teaching in any area – 20621, 20623, 20624

Students must major in art, completing the following curriculum (64 hours).

<table>
<thead>
<tr>
<th>FOUNDATIONS (15 HOURS)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ARST 1310 Basic Drawing</td>
<td></td>
</tr>
<tr>
<td>ARST 1315 2-D Design</td>
<td></td>
</tr>
<tr>
<td>ARST 2310 Figure Drawing</td>
<td></td>
</tr>
<tr>
<td>ARST 2315 3-D Design</td>
<td></td>
</tr>
<tr>
<td>ARST 2318 Designing with New Technologies</td>
<td></td>
</tr>
<tr>
<td>ARST 3310 Advanced Drawing I</td>
<td></td>
</tr>
<tr>
<td>ARST 3320 Painting I</td>
<td></td>
</tr>
<tr>
<td>ARST 3330 Printmaking I</td>
<td></td>
</tr>
<tr>
<td>ARST 3340 Graphic Design I or ARST 3380 Illustration</td>
<td></td>
</tr>
<tr>
<td>ARST 3350 Ceramics I</td>
<td></td>
</tr>
<tr>
<td>ARST 3360 Sculpture I</td>
<td></td>
</tr>
<tr>
<td>ARST 3370 Photography I</td>
<td></td>
</tr>
<tr>
<td>ARST 3312 Crafts I</td>
<td></td>
</tr>
<tr>
<td>3 HOURS OF ARST ELECTIVES</td>
<td></td>
</tr>
<tr>
<td>15 HOURS OF ART HISTORY</td>
<td></td>
</tr>
<tr>
<td>ARHA 2310 Survey of the History of Art I</td>
<td></td>
</tr>
<tr>
<td>ARHA 2311 Survey of the History of Art II</td>
<td></td>
</tr>
<tr>
<td>ARHA 2312 Survey of Non-Western Art</td>
<td></td>
</tr>
<tr>
<td>Two additional ARHA courses, excluding 2200, 4302, &amp; 4303</td>
<td></td>
</tr>
<tr>
<td>ART EDUCATION (10 HOURS)</td>
<td></td>
</tr>
<tr>
<td>ARED 3316 Teaching Art in the Secondary School</td>
<td></td>
</tr>
<tr>
<td>ARED 3345 Public School Art</td>
<td></td>
</tr>
<tr>
<td>ARED 4325 Foundations in Art Education</td>
<td></td>
</tr>
<tr>
<td>ARED 4194 Independent Study (Student teaching)</td>
<td></td>
</tr>
</tbody>
</table>

Students in the bachelor of arts in art/secondary education program who want to enroll in a master of arts in art or master of fine arts program after graduation need to take additional studio and art history course work at the undergraduate level.

### LICENSURE AREA: ENGLISH LANGUAGE ARTS

#### Praxis II Licensure Exams: English Language

- English Language Literature and Composition: Content and Analysis – 20044
- English Pedagogy – 20043

Students must major in English (a 33-hour program) in keeping with the following curriculum:

<table>
<thead>
<tr>
<th>REQUIRED COURSES (21 HOURS)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 3330 Approaches to Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 3331 Major British Writers I</td>
<td></td>
</tr>
<tr>
<td>ENGL 3332 Major British Writers II</td>
<td></td>
</tr>
<tr>
<td>ENGL 3311 History of the English Language</td>
<td></td>
</tr>
<tr>
<td>ENGL 3312 Grammatical Analysis of the English Language</td>
<td></td>
</tr>
<tr>
<td>ENGL 3360 Selected Topics (when taught as Studies in World Literature)</td>
<td></td>
</tr>
<tr>
<td>ENGL 4199 Career Perspectives</td>
<td></td>
</tr>
<tr>
<td>ENGL 4202 Teaching Literature in the Secondary Schools</td>
<td></td>
</tr>
<tr>
<td>Additional English Requirements (12 hours total) to include:</td>
<td></td>
</tr>
<tr>
<td>American Literature (3 hours)</td>
<td></td>
</tr>
<tr>
<td>ENGL 3321 American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENGL 3322 American Literature II</td>
<td></td>
</tr>
<tr>
<td>ENGL 3323 American Literature III</td>
<td></td>
</tr>
<tr>
<td>African-American Literature (3 hours)</td>
<td></td>
</tr>
<tr>
<td>ENGL 3326 African-American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENGL 3327 African-American Literature II</td>
<td></td>
</tr>
<tr>
<td>UPPER-LEVEL (3000-4000) ENGLISH ELECTIVES (6 HOURS)</td>
<td></td>
</tr>
<tr>
<td>RHET 4202 Teaching Writing in the Secondary Schools</td>
<td></td>
</tr>
<tr>
<td>RHET 3317 Introduction to Nonfiction Writing</td>
<td></td>
</tr>
<tr>
<td>ADOLESCENT LITERATURE (3 HOURS)</td>
<td></td>
</tr>
<tr>
<td>RHET 1312 (when the topic is Writing about Children and Their Literature)</td>
<td></td>
</tr>
<tr>
<td>RHET 4347 (when the topic is Writing for Children and Families)</td>
<td></td>
</tr>
<tr>
<td>SCED 4316 Adolescent Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 4370 (when the topic is Adolescent Literature)</td>
<td></td>
</tr>
</tbody>
</table>
**Licensure Area: Vocal Music**

**Praxis II Licensure Exams:**
Music: Content and Instruction – 10114

Music candidates may take any level of Principles of Learning and Teaching – 20621, 20623, 20624

Students must major in music with an emphasis in applied music and meet with the Music Department Chair each semester for advising.

**Music Major (59 hours)**

<table>
<thead>
<tr>
<th>Music Theory I</th>
<th>Music Ensemble (4 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTH 2381 Music Theory I</td>
<td>Applied Study (4 hours)</td>
</tr>
<tr>
<td>MUTH 2391 Music Theory II</td>
<td>Upper-Level Applied Study (4 hours)</td>
</tr>
<tr>
<td>MUTH 3381 Music Theory III</td>
<td>MUTH electives (3 hours)</td>
</tr>
<tr>
<td>MUTH 2291 Aural Skills I</td>
<td>MUHL 3322 Survey of Western Art Music</td>
</tr>
<tr>
<td>MUTH 2292 Aural Skills II</td>
<td>MUHL 3381 American Music</td>
</tr>
<tr>
<td>MUTH 3231 Form and Analysis</td>
<td>MUHL elective chosen from: 3351, 3361, 3370, 3371 (3 hours)</td>
</tr>
</tbody>
</table>

**Six hours of Music Electives**

**Six Semesters of MUAP 1000 Recital Attendance**

**Music Education Emphasis (14 hours)**

| MUAP 3224 Conducting I |
| MUAP 3325 Conducting II |
| MUED 3314 Vocal Pedagogy |
| MUED 3315 Teaching Choral Music in the Secondary Schools |
| MUED 3322 Music in the Elementary Grades |

Students in the secondary education track are strongly encouraged to take either MUTH 4310 Arranging or MUTH 4320 Composition I as the theory elective.

Additionally, students are required to take MUHL 3322 Survey of Western Art Music, MUHL 3381 American Music, complete at least two semesters in MUEN 4113 Concert Choir, and enroll in MUEN 4140 Community Choir each semester they are enrolled in this emphasis.

Students in the secondary education track are required to demonstrate piano/keyboard proficiency. For students with little or no piano/keyboard background, it may be necessary to take up to 8 hours of piano/keyboard classes MUAP 1214 Piano Class I, 1244 Piano Class II, 2284 Class Piano III, and 3265 Piano Skills to fulfill this requirement.

**Licensure Area: Foreign Language**

**Praxis II Licensure Exams:**

**Spanish**
Spanish: World Languages – 5195

World Languages Pedagogy – 10841

Please note: Beginning October 1, 2010, the Praxis II for Spanish students will change. The new Praxis II test for Spanish Licensure will be 0195 – Spanish: World Language. It is a 2 hours and 45 minute test. The new pedagogy test for all foreign language candidates will be 0841 – World Languages Pedagogy. It is a 2 hours test.

**French**
French: World Languages – 5174

World Languages Pedagogy – 10841

Please note: Beginning Oct, 1, 2010, the Praxis II pedagogy test for all foreign language candidates will be 0841 – World Languages Pedagogy. It is a 2 hour test.

**German**
German: World Languages – 5183

World Languages Pedagogy – 10841

Please note: Beginning Oct, 1, 2010, the Praxis II pedagogy test for all foreign language candidates will be 0841 – World Languages Pedagogy. It is a 2 hour test.

Students must major in Spanish, French, or German Studies, and it is recommended that the student also minor in a field taught in secondary schools. English, social studies, and the arts are common combinations with foreign languages. An official ACTFL-certified Oral Proficiency Interview is required for all students seeking Teacher Licensure in French, German, or Spanish. Certification at the Advanced-low oral proficiency level as defined by ACTFL is required prior to admission to student teaching in a second language. See “Department of International & Second Language Studies” for details pertaining to each of the majors in foreign languages. Second Language Education Block (12 hours)

These courses provide the requirements for the Arkansas ESL endorsement. Any part of the block may be met by demonstration of competency.

| LANG 4322 Methods of Teaching Second Languages |
| LANG 4323 Second Language Acquisition |
| LANG 4324 Teaching People of Other Cultures |
| LANG 4325 Second Language Assessment |
**Licensure Area: Social Studies – History**

**Praxis II Licensure Exams:**
Social Studies: Content Knowledge – 10086
Principles of Learning and Teaching – 20624

<table>
<thead>
<tr>
<th>History Major (30 hours)</th>
<th>6 hours of behavioral sciences from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 2311 U.S. History to 1877</td>
<td>ANTH 2316 Cultural Anthropology</td>
</tr>
<tr>
<td>HIST 2312 U.S. History since 1877</td>
<td>PSYC 2300 Psychology and the Human Experience</td>
</tr>
<tr>
<td>HIST 4355 History of Arkansas</td>
<td>SOCI 2300 Introduction to Sociology</td>
</tr>
<tr>
<td>HIST 4397 Teaching Applications</td>
<td>6 hours of geography, the following are recommended:</td>
</tr>
<tr>
<td>3 hours U.S. History Electives</td>
<td>GEOG 2310 World Regions</td>
</tr>
<tr>
<td>6 hours non-U.S. History electives (European ancient, Latin American, or Asian)</td>
<td>GEOG 2312 Cultural Geography</td>
</tr>
<tr>
<td>3 hours Senior capstone seminar (taken after 90 total hours)</td>
<td></td>
</tr>
<tr>
<td>6 hours upper level history electives</td>
<td></td>
</tr>
</tbody>
</table>

**Social Studies Minor (21-30 hours):**
If the following courses are not taken for the core, they must be taken as part of the social studies minor:

- ECON 2301 Survey of Economics
- POLS 1310 American National Government
- POLS 2301 Introduction to Political Science

**Licensure Area: Social Studies – Political Science**

**Praxis II Licensure Exams:**
Social Studies – Content Knowledge -10081
Analytical Essays – 20082
Principles of Learning and Teaching – 20524
Political Science Major (33 hours)

<table>
<thead>
<tr>
<th>POLS 1310 American National Government</th>
<th>Comparative Politics</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 2301 Introduction to Political Science</td>
<td>POLS 3360 Comparative Government: Western</td>
</tr>
<tr>
<td>POLS 3350 Arkansas Government and Politics</td>
<td>POLS 3370 Comparative Government: Developing Areas</td>
</tr>
<tr>
<td>At least three hours of POLS courses from each of the following sub-fields:</td>
<td>International Relations</td>
</tr>
<tr>
<td>American Political Institutions and Processes</td>
<td>POLS 4320 American Foreign Policy</td>
</tr>
<tr>
<td>POLS 3300 American Political Parties</td>
<td>POLS 4340 International Relations</td>
</tr>
<tr>
<td>POLS 3303 American State and Local Government</td>
<td>9 additional upper level POLS hours</td>
</tr>
<tr>
<td>POLS 3305 Elections and Public Opinion</td>
<td></td>
</tr>
<tr>
<td>POLS 3310 Policy Process</td>
<td>Social Studies Minor (21-30 hours)</td>
</tr>
<tr>
<td>POLS 3320 The American Presidency</td>
<td>ECON 2301 Survey of Economics</td>
</tr>
<tr>
<td>POLS 3325 Legislative Process and Behavior</td>
<td>SOCI 2300 Introduction to Sociology</td>
</tr>
<tr>
<td>Normative and Empirical Analysis</td>
<td>GEOG 2310 World Regions</td>
</tr>
<tr>
<td>POLS 3302 Methods of Political Inquiry</td>
<td>GEOG 2312 Cultural Geography</td>
</tr>
<tr>
<td>POLS 3390 American Political Thought</td>
<td>HIST 4355 Arkansas History</td>
</tr>
<tr>
<td>POLS 4380 Classical Political Theory</td>
<td>HIST 2311 U.S. History to 1877</td>
</tr>
<tr>
<td>POLS 4390 Modern Political Theory</td>
<td>or 2312 U.S. History from 1877 (must be a course that is not taken as part of the University Core)</td>
</tr>
<tr>
<td>Constitutional Law</td>
<td>POLS 4397 Social Studies Teaching Applications</td>
</tr>
<tr>
<td>POLS 4350 Constitutional Law: Governmental Powers</td>
<td>If the following courses are not taken as part of the University Core, they must be taken as part of the Social Studies Minor.</td>
</tr>
<tr>
<td>POLS 4351 Constitutional Law: Civil Liberties</td>
<td>ANTH 2316 Cultural Anthropology</td>
</tr>
</tbody>
</table>

**Licensure Area: K-12 Physical Education, Wellness, and Leisure Science (PEWL)**

**Praxis II K-12 PEWL Licensure Exams:**
Health & Physical Education:
Health and Physical Education: Content Knowledge – 20856
Physical Education: Content and Design – 20095
Principles of Learning and Teaching (PLT) in any areas – 20621, 20623, 20624
For the Coaching Endorsement – Test 20095 must be taken
Students must major in Health Sciences, completing the following curriculum:

**General Health Sciences Concentration Area (8 hours)**
- HSCI 3401 Nutrition
- HSCI 3412 Applied Human Sciences
- or BIOL 1411 or 1412 Human Anatomy and Physiology

**Professional Area Requirements (55 hours)**
- HSCI 2372 Care & Prevention of Injuries
- HSCI 3210 Individual Sports
- HSCI 3211 Health & Safety of Early Childhood
- HSCI 3212 Teaching Individual Sports II
- HSCI 3220 Teaching Team Sports
- HSCI 3222 Teaching Team Sports II
- HSCI 3302 Exercise Physiology
- HSCI 3310 Coaching Theory and Methodology
- or BIOL 1411 or 1412 Human Anatomy and Physiology

**Licensure Area: Mathematics**

Praxis II Licensure Exams:
- Math Content Knowledge – 10061
- Math Proofs, Models and Problems – 20063
- Math Pedagogy – 20065

Students must earn either a bachelor of science or a bachelor of arts in mathematics. See “Department of Mathematics & Statistics” for details about the BA and B.S. in Mathematics degrees. Contact an advisor in the Department of Mathematics and Statistics for details about specific course requirements.

**Licensure Area: Physical/Earth Sciences**

Praxis II Licensure Exams:
- Earth Sciences: Content Knowledge – 20571
- Physical Science: Content Knowledge – 20481
- Physical Science: Pedagogy – 20483

Students must major in Chemistry, Geology, or Physics

### Chemistry Major (Bachelor or Arts)

- CHEM 1402/1403 General Chemistry I and II
- CHEM 2310/2311 Analytical Chemistry I and II
- CHEM 3350/3351 General Organic Chem I and II
- CHEM 3150/3151 General Organic Chem Lab I and II
- CHEM 3340 Inorganic Chemistry
- CHEM 3572 Life Sciences Physical Chemistry
- CHEM 4190 Seminar
- ERSC 1302/1102 Physical Geology and 1303/1103 Historical Geology
- ERSC 3310 Earth Materials
- ERSC 3320 Field Geology I
- ERSC 4411 Igneous and Metamorphic Petrology, or 3430 Structural Geology
- IGSC 4401 Integrated Science Methods
- PHYS 1321, 1322 Elementary Physics I and II
- PHYS 1121, 1122 Elementary Physics Lab I and II
- MATH 1304 Calculus I
- MATH 1305 Calculus II
- MATH 2306 Calculus III

### Geology Major (Bachelor of Science)

- ERSC 1302/1102 Physical Geology and 1303/1103 Historical Geology
- ERSC 3310 Earth Materials
- ERSC 3320 Field Geology I
- ERSC 4411 Igneous and Metamorphic Petrology, or 3430 Structural Geology
- IGSC 4401 Integrated Science Methods
- PHYS 1321 General Chemistry I
- PHYS 3350 Electronics
- PHYS 3315 Teaching Physics in the Secondary Schools
- PHYS 4111 Advanced Lab
- PHYS 4190 Seminar
- ERSC 1302/1102 Physical Geology
- ERSC 1303/1103 Historical Geology
- ERSC 3310 Earth Materials or 3320 Field Geology I
- ERSC 4411 Igneous and Metamorphic Petrology, 3430 Structural Geology, 3440 Sedimentology, 3360 Paleobiology, or 3372 Surficial Hydrology
- CHEM 1402 General Chemistry I
- CHEM 1403 General Chemistry II
- CHEM 2310 Analytic Chemistry I
- CHEM 2311 Analytic Chemistry II
- CHEM 3350/3351 General Organic Chem I/Lab or 3355/3351 General Organic Chem II/Lab
Licensure Area: Life/Earth Sciences

Praxis II Licensure Exams:
Biology: Content Knowledge – 20235
Biology: Pedagogy – 10234
Earth Sciences: Content Knowledge – 20571
Students may major in either Biology or Geology.

Biology Major (Bachelor of Science)

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1400 Evolutionary and Environmental Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 1401 Science of Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 2401 Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 2402 Botany</td>
<td></td>
</tr>
<tr>
<td>BIOL 2403 Zoology</td>
<td></td>
</tr>
<tr>
<td>BIOL 3100 Genetics Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 3300 Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 3103 Principles of Ecology Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 3303 Principles of Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 4190 Biology Seminar</td>
<td></td>
</tr>
<tr>
<td>Biology Electives – 12 hours to include at least one course in organismal and cellular biology</td>
<td></td>
</tr>
<tr>
<td>ERSC 1302/1102 Physical Geology</td>
<td></td>
</tr>
<tr>
<td>ERSC 1303/1103 Historical Geology</td>
<td></td>
</tr>
<tr>
<td>ERSC 3380 Oceanography</td>
<td></td>
</tr>
<tr>
<td>or ERSC 3390 Weather Studies</td>
<td></td>
</tr>
</tbody>
</table>

Geology Major (Bachelor of Science)

<table>
<thead>
<tr>
<th>Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERSC 1302/1102 Physical Geology lecture/lab</td>
<td></td>
</tr>
<tr>
<td>ERSC 1303/1103 Historical Geology lecture/lab</td>
<td></td>
</tr>
<tr>
<td>ERSC 3310 Earth Materials</td>
<td></td>
</tr>
<tr>
<td>ERSC 3320 Field Geology I</td>
<td></td>
</tr>
<tr>
<td>ERSC 3430 Structural Geology</td>
<td></td>
</tr>
<tr>
<td>ERSC 3440 Sedimentology</td>
<td></td>
</tr>
<tr>
<td>ERSC 4190 Senior Seminar</td>
<td></td>
</tr>
<tr>
<td>ERSC 4411 Igneous and Metamorphic Petrology</td>
<td></td>
</tr>
<tr>
<td>ERSC 4320 Field Geology II</td>
<td></td>
</tr>
</tbody>
</table>

Courses in Secondary Education (SCED)

SCED 3110 Instructional Skills and Assessment Practicum
Prerequisite: acceptance into the secondary education minor. Corequisite: SCED 3210. This field placement requires 30 hours of observation and teaching activities in a local public school where students will apply basic instructional skills and assessments to teaching lessons within their content area. One credit hour.

SCED 3210 Instructional Skills and Assessment
Corequisite: SCED 3110. The basic instructional skills include how to utilize different approaches to teaching content and the assessment of learning for secondary students. Students develop pedagogical techniques, activities, and assessments that encourage and promote learning. Students test lesson plans, instructional skills, and selected teaching strategies in classes in area secondary schools. Two credit hours.

SCED 4122 Classroom Management
Prerequisites: admission to Block 2 of the secondary education minor and concurrent registration in all Block 2 courses. Students will learn communications, organization, and human relation skills needed for creating a fair and productive classroom. One credit hour.

SCED 4123 Adolescents with Special Needs
Prerequisite: admission to Block 2 of the secondary education minor and concurrent registration in all Block 2 courses. Students learn strategies for modifying instruction for students with special needs and legal requirements for meeting the needs of special students. One credit hour.

SCED 4124 Adolescent Diversity Practicum
Prerequisite: admission to Block 2 of the secondary education minor and concurrent registration in all Block 2 courses. This field placement requires three hours a week of observation and teaching activities in a local public school. One credit hour.

SCED 4321 Teaching Diverse Adolescents
Prerequisites: admission to Block 2 of the secondary education minor and concurrent registration in all Block 2 courses; ANTH 2316, PSYC 2300 or the equivalent. Students use concepts of adolescent development and cultural diversity to develop curriculum, design lessons, and select teaching materials and techniques to meet the needs of students at different developmental stages and of different cultures. Three credit hours.

SCED 4330 Reflective Teaching and Professionalization
Prerequisites: Blocks 1 and 2 of the secondary education minor. Corequisite: TCED 4600. Students are expected to develop their capacity to be professional, reflective practitioners as they deal directly or indirectly with teaching, management, or communications encountered during student teaching. Three credit hours.

SCED 4100, 4200, 4300 Independent Study in Secondary Education
Prerequisite: admission to teacher education program or consent of instructor. An in-depth study of special education problems in the junior or senior high school. One, two, or three credit hours.

TCED 4600 Internship
Prerequisites: SCED 4210/5210 and 4110 and 5110 and passing Praxis II (Content assessments). Co requisites: TCED 4330/5330, Reflective Teaching. This course is a 12 week field practicum that allows candidates to teach their content to high school students. Teacher Candidates are expected to develop their capacity to be professional, reflective practitioner as they deal directly or indirectly with teaching, management, or communication problems encountered during student teaching. Teacher Candidates are expected to develop lesson plans and units correlated with their specific content specialty organization standards (NSTA, NCTM, NCSS, NCTE, or AHEE) to impact student learning in the secondary classroom.
Extended Programs supports credit courses and programs through distance delivery as well as at off-campus locations. Off-campus and online credit courses are identified by location in the UALR Registration Guide and Class Schedule on BOSS.

Online and Off-Campus Programs

Online Courses/Programs

Extended Programs supports a broad array of courses and degree programs via the Internet. Online courses use a variety of tools such as streaming video, audio and video conferencing, and our learning management platform (Blackboard).

Students in online courses must have access to a computer with a current web browser and Internet access. Please note that some online instructors may require on-campus exams or proctored testing.

There is no distinction made on student transcripts between online courses and traditional courses. Please visit our website for a complete listing of online programs.

Off-Campus Courses

Some UALR courses are offered at off-campus locations within Central Arkansas. One such location is UALR Benton (see below). Another is the Arkansas Studies Institute located in downtown Little Rock.

UALR Benton Center

UALR offers an Associate of Arts in General Studies degree at the UALR Benton Center. Classes in Benton, Arkansas are administered by Extended Programs and taught by UALR faculty. On-site college entrance testing (COMPASS) is available for students age 21 years and older, as well as individual testing for all students wishing to test out of developmental courses. Students enrolled in classes at the UALR Benton Center have full student privileges at UALR’s main campus. Textbook sales and buy-back services are offered on-site. Academic advising and financial aid assistance are also available, by appointment. Students may pay their tuition and fees at the UALR Benton Center as well as sign up for a deferred payment plan.

For more information, contact UALR Benton at (501) 860-6003, or visit their website (http://ualr.edu/benton).
The Associate of Arts in General Studies (AAGS) degree was designed with the idea in mind that all students have unique goals and interests. Students’ responses on the AAGS survey, which all students obtaining the degree must complete, confirm this notion. Some students wish to obtain the degree for professional advancement within a company, while others may want to use it as a stepping stone to a bachelor’s degree. Regardless, the common thread is that the AAGS degree reinforces achievement for those who attain it.

**General Information**
UALR’s mission is to “develop the intellect of students” and “to instill in students a lifelong desire to learn.” The Associate of Arts in General Studies supports this mission by providing students with the same competencies, through the core curriculum, while preparing students to move on to complete a bachelor’s degree. This mission is accomplished through the following goals and objectives:

**Learning Objectives**
- Complete the UALR Core Curriculum. The purpose of the core curriculum is to establish a foundation for the undergraduate academic experience and to ensure that students develop fundamental skills and a lifelong commitment and ability to learn.
- Be prepared to continue studies for a bachelor’s degree.

**Goals**
- To provide students with the UALR Core Curriculum as a base for continuing in school for a bachelor’s degree.
- To encourage students to consider this degree as progress toward a higher degree.
- To enable students to feel a sense of personal accomplishment upon receipt of the AAGS degree.
- To provide students with a means of professional advancement.

### ASSOCIATE OF ARTS IN GENERAL STUDIES (60 HOURS)

<table>
<thead>
<tr>
<th>Rhetoric/Communications (9 hours-all of the following courses)</th>
<th>Lab Science (8 hours-choose from the courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 1311</td>
<td>Anthropology 1415 (lab included)</td>
</tr>
<tr>
<td>Rhetoric 1312</td>
<td>Astronomy 1301 course/lab 1101</td>
</tr>
<tr>
<td>Speech 1300</td>
<td>Biology 1400 (lab included)</td>
</tr>
<tr>
<td>Mathematics (3 hours-one of the following courses)</td>
<td>Biology 1401 (lab included)</td>
</tr>
<tr>
<td>Math 1302</td>
<td>Chemistry 1409 (lab included)</td>
</tr>
<tr>
<td>or Math 1315</td>
<td>Earth Science 1302 course/lab 1102</td>
</tr>
<tr>
<td>or MATH 1321</td>
<td>Earth Science 1303 course/lab 1103</td>
</tr>
<tr>
<td>or higher-level math</td>
<td>Social Science (6 hours-two of the following courses)</td>
</tr>
<tr>
<td>History (6 hours-all of the following courses)</td>
<td>Anthropology 2316</td>
</tr>
<tr>
<td>History 1311</td>
<td>Criminal Justice 2300</td>
</tr>
<tr>
<td>History 1312</td>
<td>ERSC 2300</td>
</tr>
<tr>
<td>U.S. History or Government (3 hours-one of the following courses)</td>
<td>Gender Studies 2300</td>
</tr>
<tr>
<td>History 2311</td>
<td>Geography 2312</td>
</tr>
<tr>
<td>or History 2312</td>
<td>Psychology 2300</td>
</tr>
<tr>
<td>or Political Science 1310</td>
<td>Sociology 2300</td>
</tr>
<tr>
<td>Fine Arts (6 hours-two of the following)</td>
<td>Economics 2301</td>
</tr>
<tr>
<td>Theatre 2300</td>
<td>Political Science 2301</td>
</tr>
<tr>
<td>or Music 2300</td>
<td>Religious Studies 2305</td>
</tr>
<tr>
<td>or Art 2200</td>
<td>Mass Communications 2330</td>
</tr>
<tr>
<td>World Humanities (3 hours-one of the following courses)</td>
<td></td>
</tr>
<tr>
<td>English 2337</td>
<td></td>
</tr>
<tr>
<td>English 2338</td>
<td></td>
</tr>
<tr>
<td>Philosophy 2320</td>
<td></td>
</tr>
</tbody>
</table>

Courses in Personal Awareness (PEAW)

The Division Chief of the Office of Undergraduate Academic Advising overviews courses in Personal Awareness. The PEAW 1300 course described below can be taken to meet the First-Year Colloquium requirement.

**PEAW 1300 The First Year Experience**
Helps students reach their educational objectives. Interactive instructional methods promote the development of critical thinking skills and positive educational values. Students 1) complete a personal assessment to enhance their understanding of communication and learning styles, lifestyle risks, and loci of control; 2) learn to identify and use appropriate resources both on campus and within the community; 3) acquire skills needed to promote study, personal wellness, goal setting and achievement; 4) develop strategies to manage money, time and stress wisely; and 5) participate in a service learning experience outside the classroom in a setting designed to foster community service. Final course grades are A, B, C, and NC. Three credit hours.

**PEAW 1190 Career Planning and Life Options**
A systematic approach to developing decision-making skills and an orientation to the world of work. The focal point of the course is the student and his or her goals. Emphasis is on clarifying and formulating realistic career goals and an appropriate career plan and strategy to achieve these goals. Final course grade is credit/no-credit. One credit hour.

**PEAW 1310 Library Research and Resources**
Basic techniques for using the library effectively. Use of information resources, including on-line catalog, computerized databases, bibliographies, and indexes. Attention to students’ individual subject needs. Three credit hours.

**PEAW 1124, 2124, 3124, 4124 Practicum: Leadership Training**
Designed to recognize and enhance the development of student leaders through an orientation to campus and community resources and through participation in service projects and social activities. Enrollment is restricted to students participating in official university leadership groups. Final course grade is credit/no-credit. One credit hour.

UALR Undergraduate Catalog 53
The disciplines within the College of Arts, Humanities, and Social Sciences (CAHSS) provide a means for exploring and evaluating the human experience. Through the arts, students learn an awareness of cultural values and gain mastery of materials and techniques needed for aesthetic expression. Study of the humanities and social sciences enables students to examine the significance of behavior, actions, and institutions that define and give meaning to life. Students learn to examine and value people as individuals, as well as collectively within cultures, and to communicate their observations effectively.

A liberally educated student is prepared to meet the challenges of contemporary society and lead a richer and more rewarding life. Graduates in the arts, humanities, and social sciences are acquainted with a broad range of knowledge and cultural expression that enables them to think critically, value learning and culture, and express themselves intelligently. Programs in this college constitute the traditional core of a baccalaureate education and prepare students for advanced study in graduate and professional schools.

In addition to teaching students to adapt, make intelligent choices, think critically, write cogently, and appreciate the arts, the College stresses preparation for specific careers through internships, graduate programs, and field experiences.

The College supports its departments' systematic assessment of student learning objectives. Although faculty, students, and other stakeholders are the heart of assessment, the College provides additional resources, coordinates assessment reporting and review processes, and serves as a center of accountability to higher levels of university governance.

While the primary focus of the College is instructional, the faculty also engages in research and creative activities and shares a commitment to serve the social, economic, and cultural development of Arkansas.

The College participates with other academic units in numerous interdisciplinary programs and cooperates with the College of Education to offer programs that prepare students for teacher licensure.

General Information

UALR’s metropolitan setting provides students in the College with rich opportunities to learn outside the traditional classroom setting. Cooperative programs exist with central Arkansas arts organizations, governmental agencies, health organizations, public schools, and businesses that afford internship and externship experiences for students. Providing ideal laboratories for study and work, these organizations and institutions participate in significant ways in the preparation of students in the College of Arts, Humanities, and Social Sciences as productive citizens.

Majors

The College offers majors in anthropology, applied design, studio art, art history, English, French, German studies, history, international studies, liberal arts, music, philosophy, political science, professional and technical writing, psychology, sociology, Spanish, theatre arts, and dance.

Five majors include tracks that prepare students for teacher licensure: English (English Language Arts); History and Political Science (Social Sciences); Music (Vocal); French, Spanish, and German (Foreign Languages); and Art. See the “Secondary Teacher Licensure” section for more details. Additionally, an online degree option in Liberal Arts is available.

Minors

Minors are offered in Nonprofit Leadership Studies, anthropology, art (studio), art history, creative writing, developmental psychology, digital graphics, English, French, gender studies, geography (housed in the Department of History), German, history, industrial psychology, international studies, legal studies, medical anthropology/sociology, Middle Eastern studies, music, philosophy, philosophy/religious studies, political science, psychology, presidential studies, religious studies, sociology, Spanish, theatre arts, dance, and writing.
Minors

Minors are offered in Nonprofit Leadership Studies, anthropology, art (studio), art history, creative writing, developmental psychology, digital graphics, English, French, gender studies, geography (housed in the Department of History), German, history, industrial psychology, international studies, legal studies, medical anthropology/sociology, Middle Eastern studies, music, philosophy, philosophy/religious studies, political science, psychology, presidential studies, religious studies, sociology, Spanish, theatre arts, dance, and writing.

Interdisciplinary Programs: Majors, Minors, and Special Centers

The following interdisciplinary majors, minors, and special centers are housed within the College. For program details and contact information for advising, see the coordinator and home department indicated for each.

• Nonprofit Leadership Studies (minor or certificate in non-profit management): Julie Flinn, Department of Sociology an Anthropology
• Center for Arkansas Studies, Department of History
• Gender Studies (minor): Sarah Beth Estes, Department of Sociology and Anthropology
• International Studies (major and minor): Department of Political Science
• Legal Studies (minor): Joseph Giammo, Department of Political Science
• Liberal Studies (major): Angela Hunter, Department of Philosophy and Liberal Studies
• Middle Eastern Studies (minor): Rebecca Glazier, Department of Political Science

Graduate Degree Programs

Graduate programs in art education, art history, liberal studies, public history, second languages, studio art, and professional and technical writing are offered in the College of Arts, Humanities, and Social Sciences. In addition, many departments in the College offer graduate courses that can apply toward a graduate degree in education. For more information about graduate degree offerings at UALR, contact the Graduate School at (501) 569-3206 or visit the UALR Graduate School website.

Undergraduate Admission Requirements for Majors within the College

For admission to a major within the College, students must meet or exceed eligibility requirements to enroll in RHET 1311 Composition I.

Advising

Keesha Johnson, Assistant Dean for Student Services.

The College of Arts, Humanities, and Social Sciences offers a comprehensive program of student advisement intended to help students transfer, register, and meet graduation requirements. Although most students will be advised in their major department, all students with special questions regarding their academic program and progress toward their degree should contact the Assistant Dean for Student Services. The Assistant Dean can also provide information regarding the transfer of credit from other institutions.

Students interested in applying to UALR who intend to major or minor in a field in this college are also encouraged to consult the College of Arts, Humanities, and Social Sciences student services. Non degree-seeking students who need help selecting courses for personal enrichment are also invited to meet with the Assistant Dean. The office of the College of Arts, Humanities, and Social Sciences is in Fine Arts 210. The office is open from 8:00 a.m. until 5:00 p.m. and for extended hours by appointment. Call (501) 569-3350 or (800) 340-6509. Interested students can also access the “Student Resources” page of the CAHSS website, or e-mail kjohnson@ualr.edu. Email inquires can also be sent to the “Ask AHSS” webpage.

Internships

The internship program allows the student to integrate traditional academic work with real world experience. Internships are defined within the academic department. Admissions and other requirements are set by each department. For more information, contact the academic department through which the internship is desired.

Cooperative Education

UALR participates in cooperative education programs with public and private agencies. Students attend classes part time or on an alternating basis while participating in a paid and credit-bearing internship. For more information contact the Office of Cooperative Education at (501) 569-3584.

Departments

The following are departments within the college that offer majors that, in combination with special course requirements and a minor in secondary education, prepare students for licensure in secondary education:

Department of Art
• Bachelor of Arts in Art
• Bachelor of Fine Arts in Art
Department of English
• Bachelor of Arts in English
Department of History
• Bachelor of Arts in History
Department of International & Second Language Studies
• Bachelor of Arts in World Languages: French, German, Spanish, and International Studies
Department of Music
• Bachelor of Arts in Music
Department of Philosophy & Liberal Studies
• Bachelor of Arts in Liberal Arts
• Bachelor of Arts in Philosophy
Department of Political Science
• Bachelor of Arts in Political Science
Department of Psychology
• Bachelor of Arts in Psychology
Department of Rhetoric & Writing
• Bachelor of Arts in Professional and Technical Writing
Department of Sociology & Anthropology
• Bachelor of Arts in Anthropology
• Bachelor of Arts in Sociology
Department of Theatre Arts & Dance
• Bachelor of Fine Art in Dance
• Bachelor of Arts in Theatre Arts
Department of Art

Fine Arts, Room 251, (501) 569-3182, (501) 683-7022 (fax), http://ualr.edu/art

Chairperson:
Bruhl, Win G., Professor

Professors:
Brown, Jane, H.
Cawood, Gary, K.
Mantle, Eric, R.
Martin, Floyd W.
Smith, Aj
Warrick, Michael R.
Williams-Smith, Marjorie

Associate Professors:
Amrhein, Laura
Cates, Kevin
Clifton, Thomas G.
Roberson, Carey W.

Assistant Professors:
Driver, Stephen
Hall, Mia
Mullins, Heidi

Artists in Residence:
Cleary, Taimur
Clemons, David

Gallery Curator/Research Associate:
Cushman, Brad E.

Assistant Gallery Curator/Research Assistant:
Larson, Nathan

Visual Resource Director:
Grace, Laura

Furniture Design Technician/Research Assistant:
Bruhl, John

The Department of Art, accredited by the National Association of Schools of Art and Design, offers undergraduate instruction leading to a baccalaureate degree in art (BA in Art) with tracks in art history, studio art, and art education. The art history track emphasizes all eras of western European art and selected non-Western subjects. The studio art track offers the breadth of a liberal arts degree while also providing students with foundational art making skills and development in a range of studio disciplines. The art history and studio art tracks in the BA in Art require a minor. The art education track prepares students for licensure to teach art at the kindergarten through secondary school level. The art education track requires a minor in Secondary Education.

A baccalaureate degree in fine art (BFA in Art) is available to students who are admitted to the program through a review process that includes portfolio and transcript review, a letter of purpose, and a short interview. For the current academic year requirements for the review process, see information posted on the art department web site, http://ualr.edu/art/. The BFA in Art has three tracks: fine art (studio art), applied design, and art education. The fine art track offers specialization or emphasis areas in drawing, painting, graphic design, illustration, photography, printmaking, and sculpture. The applied design track offers emphasis areas in furniture design, metals and functional ceramics. The art education track prepares students for licensure to teach art at the kindergarten through secondary school level as well as allowing these students to develop a BFA studio or applied design emphasis.

General Information

Courses in crafts, fibers, blacksmithing and museum studies are also offered. The department makes available numerous courses in art education, art history, and studio art for students not majoring in art who are interested in art electives. Minors are available in art history, studio art, photography, and digital graphics.

To enrich the instructional program, the department offers continuous exhibits in three galleries in the Fine Arts Building and enjoys a cooperative relationship with the Arkansas Arts Center. Four art student organizations, The Association of Student Artists, The Clay Guild, The Routery Club, and The League of Extraordinary Metalsmiths are available to any student artist.

Arkansas Arts Center

The Department of Art collaborates with the Arkansas Arts Center to offer cooperative programs that benefit the public and academic communities. The Arts Center serves as an important teaching resource by providing outstanding national and regional exhibitions. On occasion, special studio workshops are offered by respected visiting artists from throughout the United States. The museum studies course is taught at the Arkansas Arts Center by Arts Center Staff.
Art Advisors

The department has advisors for both undergraduate and graduate students. Incoming freshmen and transfer students should contact the department chair, Professor Win Bruhl, wbbruhl@ualr.edu, for initial advising. Continuing undergraduates should contact Professors Marjorie Williams-Smith (mwsmith@ualr.edu), Jane Brown (jbrown@ualr.edu), or Floyd Martin (fwmartin@ualr.edu) for assistance with their academic programs. Students interested in public school teaching should contact Professor Heidi Mullins at (hcmullins@ualr.edu). Undergraduate students who have completed a minimum of 100 academic credits should contact Professor Aj Smith (ajsmitl@ualr.edu). Prospective or current students may also call the art department at (501) 569-3182 to contact an advisor.

Transfer Students

Students transferring to UALR who intend to major in art should contact the department before enrolling to arrange for advising. Students may be required to take additional hours in areas where deficiencies are noted.

Transfer students must complete at least nine hours of their studio concentration at UALR. For example, a student who has 15 hours accepted in transfer credit for painting must complete an additional nine hours of painting at UALR if painting is the studio concentration.

Senior Show for BA in Art/Art History

Studio majors in the last semester of their senior year in the BA in Art degree are required to register for ARST 4397, Capstone in the Visual Arts. As part of course requirements, students will prepare a group exhibition of their work. The senior show will be scheduled by the gallery curator, and must be approved by the student’s emphasis advisor, academic advisor, the gallery curator, and the department chairperson. Each student must also give an oral presentation in the form of a PowerPoint presentation before the last class day, and will become the property of the Department of Art.

Senior Show for BFA in Art/Fine Art, Applied Design, and Art Education Tracks

BFA students in the last two semesters of their senior year are required to register for ARST 4394 and ARST 4395, BFA Projects 1 and 2, which are taken in consecutive semesters. In the final semester BFA students in the fine art and applied design tracks also register for ARST 4397, Capstone in the Visual Arts. For students in the art education track, their student teaching functions as the capstone experience. As part of course requirements, students will prepare an exhibit of their work. The senior show will be scheduled by the gallery curator, and must be approved by the student’s emphasis advisor, academic advisor, the gallery curator, and the department chairperson. Each student must also give an oral presentation in the form of a PowerPoint presentation before the last class day, and will become the property of the Department of Art.

Senior Portfolio for BFA Majors

As part of a BFA student’s capstone requirements, studio majors will prepare a portfolio of 20 images documenting their senior show and other work, along with a written artist’s statement (minimum one page). Portfolio images are presented in a CD format and delivered to the BFA coordinator. This portfolio must be approved by the ARST 4395 faculty of record, the emphasis advisor and department chair. The portfolio will be due one week before the last class day, and will become the property of the Department of Art.

Senior Paper for BA in Art/Art History Majors

Art history majors in the last semester of their senior year are required to register for ARHA 4397 Capstone in Art History. As part of capstone requirements, students will write a senior paper, which will also be given orally. The paper must be approved by the student’s major advisor, ARHA 4397 faculty of record, academic advisor, and the art history coordinator. The oral presentation may be in the form of a public lecture, presentation to a class, or a paper at a scholarly meeting.

Senior Portfolio for Art History Majors

Art history majors enrolled in ARHA 4397 are required to prepare a portfolio of their senior paper and three other papers written for classes while at UALR. This portfolio must be approved by the major advisor, ARHA faculty of record, and the art history coordinator. The portfolio will be due one week before the last class day, and will become the property of the Department of Art.

No grade less than C will be accepted in any art course required within any art major or minor.

Minor in Art History

A minor in art history consists of 18 hours in art history, including ARHA 2310, 2311, and 12 hours of electives, excluding ARHA 2305.

Minor in Studio Art

A minor in studio art consists of 18 hours to include 6 hours of drawing, 6 hours of design, and 6 hours of upper-level electives in studio work.

Art History Students/Studio Art Minor

Students who pursue the art history track may choose to minor in studio art. Since ARST 1310 Basic Drawing, ARST 1315 Two-Dimensional Design, and ARST 2315 Three-Dimensional Design are included in the art history major, students choosing a studio art minor will also complete ARST 2310 Figure Drawing, and two upper-level studio art courses. These hours may be in one discipline (e.g. Painting Fundamentals 1 and Painting Fundamentals 2) or selected emphasis areas (e.g. Painting Fundamentals 1 and Introduction to Photography).

Minor in Digital Graphics

The minor in digital graphics is open to all majors and makes it possible for non-degree seeking students and non-art majors to select an industry specific minor in the arts. The curriculum for the minor consists of 18 hours in studio art, including ARST 1310, 1315, 2318, 3385, 3386, and 4348.

Minor in Photography

The minor in photography is open to all majors. The curriculum for the minor consists of 18 hours in studio art, including ARST 2318, 3370, 3371, and three courses from 4370, 4371, 4372, 4373, and 4315 (photography).
Art Courses as Electives

Studio Art

Non-art majors may elect to take studio art foundations courses numbered ARST 1310, 1315, 2310, 2315, and 2318. Upon completion of prerequisites, students may enroll in any of the Studio Foundation courses (e.g., ARST 3320 Painting Fundamentals I, 3360 Introduction to Sculpture, 3370 Introduction to Photography, etc.) on either a pass/fail or grade basis. Although prerequisites are recommended, the following courses may be taken without prerequisites: ARAD 3310 Intro to Furniture, ARAD 3320 Intro to Metalsmithing & Jewelry, ARAD 3350, Introduction to Ceramics, ARST 3320 Painting Fundamentals I, and ARST 3370 Introduction to Photography.

Art History

Students who have training in related disciplines that prepare them for advanced art history courses (for example, history, English, and religious studies), may elect advanced courses in art history without taking ARHA 2310 and 2311. Students in doubt about their preparedness for art history should consult an art history instructor.

Secondary Teacher Licensure

See “Secondary Teacher Licensure” for details and contact Dr. Heidi Mullins in the Department of Art about the curriculum.

Degree Requirements

Floyd Martin, coordinator

The BA in art/art history track is for students especially interested in the history, theory, and criticism of the visual arts. The major will provide a solid foundation for students who wish to pursue the master or PhD programs in art history that are necessary for careers in university teaching, research, and the museum field. For those pursuing other interests, the major in art history, which is decidedly a liberal arts field, encourages development of analytical and critical viewing and writing skills useful in such careers as law, medicine, and business.

Students should plan carefully and check the long-range schedule of course offerings with the art history coordinator if interested in a particular course. ARHA 2310 Survey I and 2311 Survey II are offered fall and spring. Upper-level courses are normally offered once every two years.

Bachelor of Arts in Art History

The undraped human figure is a significant subject within the studio art curriculum.

Core Requirements (44 hours)

Art History Foundation (9 hours)
- ARHA 2310 Survey of the History of Art I
- ARHA 2311 Survey of the History of Art II
- ARHA 2312 Survey of Non-Western Art

Primary Courses (24 hours)
- ARHA 4300 Studies in the History of Art

Period Courses (select 12 hours)
- ARHA 3304 Medieval Art
- ARHA 4304 Ancient Art
- ARHA 4305 Italian Renaissance Art
- ARHA 4306 Renaissance Art in Northern Europe
- ARHA 4384 Baroque Art
- ARHA 4307 Eighteenth and Nineteenth-Century Art in Europe
- ARHA 4387 Late Nineteenth- and Early Twentieth-Century Art in Europe
- ARHA 4308 Twentieth-Century Painting, Sculpture, and Graphic Arts Since 1945

Seminar and Special Topics course (select 3 hours)
- ARHA 4385 Seminar in Italian Renaissance and Baroque Art
- ARHA 4386 Problems in Northern European Renaissance and Baroque Art
- ARHA 4388 Problems in Modern Art
- ARHA 4310 Special Topics in Art History

Art History Electives (6 hours)
- One non-Western area upper-level art history course
- Any upper-level art history course

Capstone-Art History (3 hours)
- ARST 2310 Basic Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

Minor (18 hours)
- Upper-Level General Elective (1 hour)

Note: General electives for Art History students: It is recommended that at least one general elective course be a foreign language course beyond the Intermediate 1 level.

Bachelor of Arts in Art—Track

The undraped human figure is a significant subject within the studio art curriculum.

Core Requirements (44 hours)

Second Language Proficiency

Art History Foundation Courses (9 hours)
- ARST 1310 Basic Drawing
- ARST 1315 Two-Dimensional Design
- ARST 2310 Figure Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

Art History Foundation Courses (9 hours)
- ARST 1310 Survey of the History of Art I
- ARST 2311 Survey of the History of Art II
- ARST 2312 Survey of Non-Western Art
- ARST 2318 Computer Applications in Art

3 hours upper-level art history course

---

1 No grade less than a C will be accepted in any art course required within any art major or minor.
2 See “Core Requirements.” It is recommended that RHET 1311, RHET 1212, HIST 1311, and HIST 1312 be taken before or concurrently with ARHA 2310 and ARHA 2311.
3 See “Second Language Requirement.”
Studio Art Foundation Courses (12 hours)
6 hours of Two-Dimensional courses:
- ARST 3310 Drawing: Creative Invention
- ARST 3340 Introduction to Graphic Design
- ARST 3380 Introduction to Illustration
- ARST 3320 Painting Fundamentals 1
- ARST 3330 Printmaking Basics
- ARST 3370 Introduction to Photography
6 hours of Three-Dimensional courses:
- ARAD 3310 Introduction to Furniture Design
- ARAD 3320 Introduction to Jewelry and Metalsmithing
- ARAD 3330 Introduction to Fiber Design
- ARAD 3340 Introduction to Blacksmithing
- ARAD 3350 Introduction to Ceramics
- ARST 3360 Introduction to Sculpture

Upper Level Art Studio Electives (6 hours)
Two upper-level courses in art studio or applied design (ARST and/or ARAD)

Capstone (3 hours)
- ARST 4397 Capstone in the Visual Arts

Group Senior Show

Exhibition of recent art

Minor (18 hours)

Electives (17 hours)
45 hours of upper level courses required for graduation; 21 hours of upper-level credits are required within the minor and general electives.

Bachelor of Arts in Art/Art Education Track

The undraped human figure is a significant subject within the studio art curriculum.

Core Requirements (44 hours)

Studio Prerequisites (15 hours)
- ARST 1310 Basic Drawing
- ARST 1315 Two-Dimensional Design
- ARST 2310 Figure Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

Art History (15 hours)
- ARHA 2310 Survey of the History of Art I
- ARHA 2311 Survey of the History of Art II
- ARHA 2312 Survey of Non-Western Art

Two upper level art history electives; ARHA 3309 required for Applied Design track

Studio Foundation Courses (18 hours)
- ARST 3312 Contemporary Craft
- ARST 3360 Introduction to Sculpture
- ARAD 3310 Introduction to Furniture Design
- ARAD 3320 Introduction Metalsmithing & Jewelry
- ARAD 3330 Introduction to Fiber Design
- ARAD 3340 Introduction to Blacksmithing
- ARAD 3350 Introduction to Ceramics

Bachelor of Fine Arts in Art-Fine Art and Applied Design Tracks

The undraped human figure is a significant subject within the studio art curriculum.

Admission to BFA in Art is by review process, see above. Hours completed in the BA in Art degree will apply to required hours in the BFA degree.

Core Requirements (44 hours)

Second Language Proficiency

Studio Prerequisites (15 hours)
- ARST 1310 Basic Drawing
- ARST 1315 Two-Dimensional Design
- ARST 2310 Figure Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

Art History (15 hours)
- ARHA 2310 Survey of the History of Art I
- ARHA 2311 Survey of the History of Art II
- ARHA 2312 Survey of Non-Western Art

Two upper level elective art history courses; ARHA 3309 required for Applied Design track

Studio Foundation Courses (18 hours)
- ARST 3312 Contemporary Craft
- ARST 3360 Introduction to Sculpture
- ARAD 3310 Introduction to Furniture Design
- ARAD 3320 Introduction Metalsmithing & Jewelry
- ARAD 3330 Introduction to Fiber Design
- ARAD 3340 Introduction to Blacksmithing
- ARAD 3350 Introduction to Ceramics

Bachelor of Arts in Art Education Track

Second Language Proficiency

Studio Prerequisite Courses (15 hours)
- ARST 1310 Basic Drawing
- ARST 1315 Two-Dimensional Design
- ARST 2310 Figure Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

Art History (15 hours)
- ARHA 2310 Survey of the History of Art I
- ARHA 2311 Survey of the History of Art II
- ARHA 2312 Survey of Non-Western Art

Two upper level art history electives; ARHA 3309 required for Applied Design track

Studio Foundation Courses (18 hours)
- ARST 3312 Contemporary Craft
- ARST 3360 Introduction to Sculpture
- ARAD 3310 Introduction to Furniture Design
- ARAD 3320 Introduction Metalsmithing & Jewelry
- ARAD 3330 Introduction to Fiber Design
- ARAD 3340 Introduction to Blacksmithing
- ARAD 3350 Introduction to Ceramics

Bachelor of Fine Arts in Art-Fine Art and Applied Design Tracks

The undraped human figure is a significant subject within the studio art curriculum.

Admission to BFA in Art is by review process, see above. Hours completed in the BA in Art degree will apply to required hours in the BFA degree.

Core Requirements (44 hours)

Second Language Proficiency

Studio Prerequisites (15 hours)
- ARST 1310 Basic Drawing
- ARST 1315 Two-Dimensional Design
- ARST 2310 Figure Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

Art History (15 hours)
- ARHA 2310 Survey of the History of Art I
- ARHA 2311 Survey of the History of Art II
- ARHA 2312 Survey of Non-Western Art

Two upper level elective art history courses; ARHA 3309 required for Applied Design track

Studio Foundation Courses (18 hours)
- ARST 3312 Contemporary Craft
- ARST 3360 Introduction to Sculpture
- ARAD 3310 Introduction to Furniture Design
- ARAD 3320 Introduction Metalsmithing & Jewelry
- ARAD 3330 Introduction to Fiber Design
- ARAD 3340 Introduction to Blacksmithing
- ARAD 3350 Introduction to Ceramics

Bachelor of Arts in Art Education Track

Second Language Proficiency

Studio Prerequisite Courses (15 hours)
- ARST 1310 Basic Drawing
- ARST 1315 Two-Dimensional Design
- ARST 2310 Figure Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

Art History (15 hours)
- ARHA 2310 Survey of the History of Art I
- ARHA 2311 Survey of the History of Art II
- ARHA 2312 Survey of Non-Western Art

Two upper level art history electives; ARHA 3309 required for Applied Design track

Studio Foundation Courses (18 hours)
- ARST 3312 Contemporary Craft
- ARST 3360 Introduction to Sculpture
- ARAD 3310 Introduction to Furniture Design
- ARAD 3320 Introduction Metalsmithing & Jewelry
- ARAD 3330 Introduction to Fiber Design
- ARAD 3340 Introduction to Blacksmithing
- ARAD 3350 Introduction to Ceramics

Bachelor of Fine Arts in Art-Fine Art and Applied Design Tracks

The undraped human figure is a significant subject within the studio art curriculum.

Admission to BFA in Art is by review process, see above. Hours completed in the BA in Art degree will apply to required hours in the BFA degree.

Core Requirements (44 hours)

Second Language Proficiency

Studio Prerequisites (15 hours)
- ARST 1310 Basic Drawing
- ARST 1315 Two-Dimensional Design
- ARST 2310 Figure Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

Art History (15 hours)
- ARHA 2310 Survey of the History of Art I
- ARHA 2311 Survey of the History of Art II
- ARHA 2312 Survey of Non-Western Art

Two upper level elective art history courses; ARHA 3309 required for Applied Design track

Studio Foundation Courses (18 hours)
- ARST 3312 Contemporary Craft
- ARST 3360 Introduction to Sculpture
- ARAD 3310 Introduction to Furniture Design
- ARAD 3320 Introduction Metalsmithing & Jewelry
- ARAD 3330 Introduction to Fiber Design
- ARAD 3340 Introduction to Blacksmithing
- ARAD 3350 Introduction to Ceramics
12 hours required for Two-Dimensional students, 6 hours required for Three-Dimensional students

- ARST 3310 Drawing: Creative Invention
- ARST 3320 Painting Fundamentals 1
- ARST 3330 Printmaking Basics
- ARST 3340 Introduction to Graphic Design
- ARST 3370 Introduction to Photography
- ARST 3380 Introduction to Illustration

12 hours – Upper level courses in Fine Art or Applied Design emphasis beyond beginning studio art foundations.

- 3 hours – Upper level studio art elective from ARAD or ARST
- 3 hours – ARST 4397 Capstone: Studio Art or internship in selected emphasis area.
- 6 hours – ARST 4394 and ARST 4395 BFA Project (1 & 2, taken in sequence)

Senior Show and Senior Portfolio

Exhibition of recent art, oral presentation, written statement, and 20 CD images of recent work

45 hours of upper level courses required for graduation are met by courses listed above.

**BACHELOR OF FINE ARTS IN ART/ ART EDUCATION TRACK**

The undraped human figure is a significant subject within the studio art curriculum.

**Core Requirements (44 hours)**

**Second Language Proficiency**

**Studio Prerequisite Courses (15 hours)**

- ARST 1310 Basic Drawing
- ARST 1315 Two-Dimensional Design
- ARST 2310 Figure Drawing
- ARST 2315 Three-Dimensional Design
- ARST 2318 Computer Applications in Art

**Art History Foundation Courses (12 hours)**

- 6 hours from Survey Courses:
  - ARHA 2310 Survey of the History of Art I
  - ARHA 2311 Survey of the History of Art II

- Two upper level art history electives

**Studio Foundations (27 hours)**

- ARAD 3350 Introduction to Ceramics
- ARST 3310 Drawing: Creative Invention
- ARST 3312 Contemporary Craft
- ARST 3320 Painting Fundamentals 1
- ARST 3330 Printmaking Basics
- ARST 3340 Introduction to Graphic Design
- ARST 3360 Introduction to Sculpture
- ARST 3370 Introduction to Photography

- 3 hours of ARAD or ARST electives

**Studio emphasis (12 hours)**

Upper level fine art or applied design in emphasis beyond beginning studio art foundations.

- 6 hours – ARST 4394 and ARST 4395 BFA Project (1 & 2, taken in sequence)

Senior Show and Senior Portfolio

Exhibition of recent art, oral presentation, written statement, and 20 CD images of recent work

**Art Education (10 hours)**

- ARED 3316 Teaching Art in the Secondary School
- ARED 3345 Public School Art
- ARED 4325 Foundations of Art Education
- ARED 4194 Student Teaching Seminar**

**Professional Education Courses (minor in Secondary Education, 18 hours)**

- SCED 3210 Instructional Skills**
- SCED 3110 Instructional Skills Practicum**
- SCED 4321 Teaching Diverse Adolescents**
- SCED 4122 Classroom Management**
- SCED 4123 Adolescents w/Special Needs**
- SCED 4124 Adolescent Diversity Practicum**
- SCED 4330 Reflective Teaching & Professionalism**
- TCED 4600 Student Teaching/Clinical Experience** (concurrent with ARED 4194 Student Teaching Seminar)

**Praxis I must be passed before enrolling in SCED, TCED, and ARED 4194 courses. GPA of 2.65 is required for admission to the education program. Praxis II must be passed prior to graduating.

45 hours of upper level courses required for graduation are met by courses listed above.

**Courses in Studio Art (ARAD-Applied Design Track)**

**ARAD 3310 Introduction to Furniture Design**

A beginning course in the fundamentals of furniture design and construction. Students will design multiple furniture items and develop working drawings and scale models; learn basic material selection; and employ appropriate wood joinery and finishing. The course will require the use of hand and power tools while constructing a basic freestanding bench and table. Three credit hours.

**ARAD 3320 Introduction to Jewelry and Metalsmithing**

This course is an introduction to principle techniques involved in jewelry making and metalsmithing. Basic fabrication, forming, connections (hot and cold), surface treatments, and finishing methods will be covered. An emphasis will be placed on the students’ mastery of problem solving, layout and design, and attention to craftsmanship in the execution of their projects. Visual presentations covering practicing smiths and historic trends will accompany the course curriculum to expose students to past and contemporary methods and ideologies in the field of jewelry and metalsmithing. Through discussions and critiques students will expand their ability to effectively speak about their work and constructively evaluate the work of their peers. The skills acquired in this course will provide the foundation for subsequent ideas and techniques related to the field of metalsmithing and jewelry. Three credit hours.

**ARAD 3330 Introduction to Fiber Design**

A beginning course in the fundamentals of fiber design. This course explores traditional and contemporary techniques and processes on fabric and other fiber surfaces and will introduce students to basic surface design techniques as well as basic loom and off loom weaving. Students will design and construct several samples and objects utilizing the materials and methods demonstrated throughout the course. Three credit hours.
ARAD 3340 Introduction to Blacksmithing
Prerequisites: ARST 2315 and ARST 3360. This course will focus on basic blacksmithing techniques such as how to light a coal fire, connecting multiple pieces of stock using traditional blacksmithing processes, basic skills and a working knowledge of how to operate properly all equipment in the studio. Three credit hours.

ARAD 3350 Introduction to Ceramics
This course will be a thorough survey of basic hand building and wheel throwing processes, making additions such as handles and spouts through a traditional and functional focus. Creative process, critical thinking and the development of design skills are also important elements of this course. Learning how to load and fire kilns and competency in basic glaze and clay formulation and application are also emphasized. Three credit hours.

ARAD 4310 Case Furniture Design
Prerequisite: ARST 2315, ARAD 3310. An advanced course in furniture design and construction. Students will be introduced to basic wood box and cabinet design and construction. Students will design multiple furniture items and develop working drawings and scale models, practice appropriate material selection; and employ complex wood joinery and finishing. The course will require the use of hand and power tools while constructing a free standing shelving unit and a wall mounted or free standing cabinet with doors and drawers. Three credit hours.

ARAD 4311 Complex Furniture Design
Prerequisite: ARST 2315, ARAD 3310. An advanced course in complex furniture design and construction. Students will be introduced to ergonomic considerations in the design and construction of a chair. Students will develop working drawings and a scale model; practice appropriate material selection; and employ complex wood joinery and appropriate finishing. The course will require the use of hand and power tools while constructing a chair of unique or historical design integrating at least one material in addition to wood. Three credit hours.

ARAD 4312 Plywood & Composites
Prerequisite: ARAD 4310. An advanced course in Furniture Design where students will be introduced to working with non-solid wood materials in sheet-goods format such as plywood, MDF and other composites as well as the different techniques involved in veneering. Different bending techniques with appropriate molds and a vacuum bag will be covered as well. Students will design and construct several furniture objects by developing working drawings and a scale model; practice appropriate material selection; and employ complex and appropriate joinery and finishing. The course will require the use of hand and power tools while constructing a piece of furniture utilizing sheet goods and/or veneer. Three credit hours.

ARAD 4313 Lighting & Small Objects
Prerequisite: ARAD 4311. An advanced course in Furniture Design that will introduce students to the basics of lighting and small functional object design and construction. Students will design and construct several functional pieces, by developing working drawings and a scale models; practice appropriate material selection; and employ complex and appropriate joinery and finishing. Three credit hours.

ARAD 4314 Alternative Furniture Media
Prerequisite: ARAD 4311. An advanced course in furniture design and construction that will introduce non-wood materials associated with furniture making. Examples are: metal, fiberglass, mold-making and casting non-metals such as concrete, plaster and plastics as well as other alternative and experimental materials. Students will design and construct several furniture pieces by developing working drawings and a scale model; practice appropriate material selection; and employ complex and appropriate joinery and finishing. The pieces will utilize one or several of the techniques and materials covered in the course. Experimentation and material research is expected. Three credit hours.

ARAD 4320 Surface Methods in Metals
Prerequisite: ARAD 3303. This course is a continuation of techniques studied in ARAD 3320. Additional surface development techniques will be introduced and greater focus will be placed on a combination of surface treatments and stone setting methods. The resulting pieces will be directed to thoughtfully consider a relationship to the body. The new embellishment techniques will help students to continue to advance their technical skills and build a stronger sensitivity to the integration of innovative approaches and disparate materials in a cohesive manner for objects of adornment. Three credit hours.

ARAD 4321 Metal Hollowware & Color
Prerequisite: ARAD 4320. This course will build upon the technical and conceptual foundation created in ARAD 4320. Within this course students will be introduced to various sheet forming techniques and finishing processes in the production of small-scale formed elements for jewelry, vessel forms, and small-scale sculptural objects derived from forming processes. Forming techniques covered in this class will consider direct methods of shaping flat sheet and techniques forming various Seamed pieces. Investigation into the coloring techniques including patination and enamelng will be considered as methods of embellishment for the forms created by the students. Continued critical discussion and increased technical rigor of this course will help students to gain a more comprehensive ability to conceive their ideas and effectively execute them. Three credit hours.

ARAD 4322 Small Metal Casting
Prerequisite: ARAD 4320. Casting will be explored as a method for developing three-dimensional forms in metal derived from constructed and found models. Students will investigate direct and machine enabled methods of mold making and casting. Additional processes surrounding mass production of components will be considered in this course. Alternative methods and materials for casting will also be introduced in this course. An emphasis will be placed on combining previously learned techniques with newly acquired techniques in a method that is visually cohesive and technically proficient. Three credit hours.

ARAD 4323 Metal Mechanisms
Prerequisite: ARAD 4321. This course will include a more technically proficient. Three credit hours.

ARAD 4324 Complex Metal Vessels
Prerequisite: ARAD 4321. Students in this intensive course will design and execute a large-scale functional vessel or series of vessels. The course will reinforce technical competency and an exploration of personal design skills in the creation of preliminary forms and finished piece for this course. An emphasis will be placed on research of historic and contemporary examples, design, appropriate technical methods, and selection and integration of materials. Students will be responsible for a comprehensive and sophisticated integration of previously acquired techniques to conceive and execute the final pieces. Three credit hours.
ARAD 4340 Intermediate Blacksmithing
Prerequisites: ARAD 3340. This course will further explore the many possibilities of what blacksmithing can be in contemporary forge work. An emphasis will be placed on the traditional use of techniques whenever possible. Various hot methods: fabrication processes, welding and limited use of machining methods will be explored. Three credit hours.

ARAD 4350 Wheel Throwing
Prerequisite: ARAD 3350 and ARST 2315. Further study in the medium of clay, with emphasis on the use of the potter’s wheel. Introduction of reduction glazes and firing of the kiln. Three credit hours.

ARAD 4351 Advanced Handbuilding
Prerequisite: ARAD 4350. For the ceramics major who wants to gain greater proficiency in a variety hand building techniques, such as coil, slab and extrusions, and mold designing and making. Three credit hours.

ARAD 4352 Production Ceramics
Prerequisite: ARAD 4350 or ARAD 4351. This course focuses on the exploration of functional ceramics through a variety of advanced forming and finishing techniques to assist with a production oriented studio methodology. By using traditional based processes, students will build a greater proficiency in ceramic firing, and clay and glaze technology for functional ware. Three credit hours.

ARAD 4353 Kiln Construction
Prerequisite: ARAD 4350. A thorough study of the history of kiln building over time and cultures. The course will include the designing of a kiln for a specific ceramic process, an introduction to brick laying, welding, arch forming, and other kiln fabrication skills, and the building of a student designed kiln. Students will also make enough work to fill and test the kiln. Three credit hours.

ARAD 4354 Ceramics Sculpture
Prerequisite: ARAD 4351. Emphasis on clay as an expressive medium, stressing sculptural rather than functional concepts. Continued experience with glazes and kiln firing. Three credit hours.

ARAD 4398, 4698 Applied Design Internship
Prerequisite: Departmental approval. This experience will provide students with a supervised, practical experience to put into practice the skills learned in the academic setting. It will develop aspects of the art profession appropriately learned in real work situations. It will provide an opportunity for art students to work under the supervision of a professional artist. Three or six credit hours.

ARAD 4115, 4215, 4315 Advanced Problems in Design
Experimental materials and techniques in applied design, including the correlation of visual design elements with those of various multidimensional work not usually covered by normal course offerings. Course content, subtitle, and organization vary. One, two, or three credit hours.

Courses in Art Education (ARED)
ARED 3245 Public School Art
An investigation of elementary-level art education focusing on materials and methods for teaching art history, art criticism, and studio production to children. Attention is given to the relationship of the visual arts to general education, developmental growth of children in art, curriculum planning, and current issues in art education. This course is offered for preprofessional teachers in the College of Education’s Early Childhood Education program. Two credit hours.

ARED 3316 Teaching Art in the Secondary School
Methods and materials for teaching art in the secondary school. (See “Secondary Teacher Licensure”) Three credit hours.

ARED 3345 Public School Art
An investigation of elementary-level art education focusing on materials and methods for teaching art history, art criticism, and studio production to children. Attention is given to the relationship of the visual arts to general education, developmental growth of children in art, curriculum planning, and current issues in art education. Three credit hours.

ARED 4325 Foundations in Art Education
A survey of the history of art education with an emphasis on the changing philosophies, theories of learning, and the subsequent goals and objectives made apparent in curriculum development. Dual-listed in the UALR Graduate Catalog as ARED 5325. Three credit hours.

ARED 4194, 4294, 4394 Independent Study
Prerequisite: consent of instructor. Research on a subject selected in consultation with the instructor. Admission to this course must be approved by the art education advisor before registration. May be taken for one, two, or three credit hours.

Courses in Art History (ARHA)
Prerequisites for all advanced courses in the history of art: ARHA 2310 for ancient and medieval; ARHA 2311 for all other courses; or consent of instructor. ARHA 2310 must precede ARHA 2311. Upper-level courses are offered no more frequently than once every two years; they are offered on an irregular basis during summer terms.

Each art history credit hour requires three clock hours of work each week. One hour is scheduled in class and the additional two hours are scheduled outside class.

The undraped human figure appears as a significant subject throughout much of art history and is evident within the art history curriculum.

ARHA 2305 Introduction to Visual Art
Recommended prerequisite: RHET 1311. Introduction to the creative process and history of art, vocabulary and descriptive terms used in the visual arts, and how to write about them. Attendance at arts events is required. Students will learn through writing, reading, discussing, listening, and participating in critical thinking and problem-solving activities. Fulfills core requirement in aesthetics along with student’s choice of either MUHL 2305 and THEA 2305. Three credit hours.

ARHA 2310 Survey of the History of Art I
Survey of the art history from prehistoric times to the Renaissance. Three credit hours.

ARHA 2311 Survey of the History of Art II
Prerequisite: ARHA 2310 or consent of instructor. Survey of the history of art from the Renaissance through the contemporary period. Three credit hours.

ARHA 2312 Survey of Non-Western Art
Prerequisite: ARHA 2310 or consent of instructor. Introduction to art outside the Western European tradition which focuses on the major artistic traditions of India, China, Japan, Africa, Oceanica, and the Americas. Emphasis is placed on recognition of major works of art and artistic style and what these reveal about the cultures that produced them. Three credit hours.

ARHA 3301 American Art
Prerequisite: ARHA 2311 or consent of instructor. American art from the colonial period to early twentieth century. Three credit hours.
ARHA 3302 History of Photography and Related Visual Arts
Prerequisite: ARHA 2311 or consent of instructor. Major figures in the history of art who used the camera as their medium, beginning with the nineteenth-century figures such as Daguerre and Fox-Talbot and continuing to the present. Emphasis on the analysis of photographs, motion pictures, and video works in terms of style, iconography, social history, and connoisseurship. Three credit hours.

ARHA 3304 Medieval Art
Prerequisite: ARHA 2310 or consent of instructor. Early Christian, Byzantine, Carolingian, Ottonian, Romanesque, and Gothic art. Three credit hours.

ARHA 3309 History of Design
Prerequisite: ARHA 2311 or consent of the instructor. This course will present major artists and movements in the history of textiles, ceramics, metals, wood, and graphic design, with emphasis on the modern period. Three credit hours.

ARHA 4300 Studies in the History of Art
Prerequisite: ARHA 2311 or consent of instructor. A seminar for advanced students involving research on topics in art history, criticism, and aesthetics selected for study by students in consultation with art history faculty. Dual-listed in the UALR Graduate Catalog as ARHA 5300. Three credit hours.

ARHA 4301 Art and Architecture Study Tour
Prerequisite: ARHA 2311 or consent of instructor. Travel study tour involving directed reading and research on objects to be seen during the tour. Three credit hours.

ARHA 4302 Art Museum Studies
Prerequisite: 6 hours of upper-level art history courses or permission of instructor. An introduction to art museum operation, topics covered will include the acquisition, management, and care of works of art, exhibition planning and installation, administration functions, educational and community roles of museums, finance and fundraising. The goals of the course are to familiarize students with the day-to-day work of an art museum and to engage them in critical thinking about the broader context in which it operates. Three credit hours.

ARHA 4304 Ancient Art
Prerequisite: ARHA 2310 or consent of instructor. A study of the history of ancient art and architecture with emphasis on the Greek and Roman periods. Three credit hours.

ARHA 4305 Italian Renaissance Art
Prerequisite: ARHA 2311 or consent of instructor. Painting, sculpture, and architecture in Italy from c. 1300 to c. 1600. Dual-listed in the UALR Graduate Catalog as ARHA 5305. Three credit hours.

ARHA 4306 Renaissance Art in Northern Europe
Prerequisite: ARHA 2311 or consent of instructor. Painting, sculpture, architecture, and graphic arts in northern Europe (especially the Low Countries, France, and England), from the end of the Gothic period through the Reformation. Dual-listed in the UALR Graduate Catalog as ARHA 5306. Three credit hours.

ARHA 4307 Eighteenth and Nineteenth-Century Art in Europe
Prerequisite: ARHA 2311 or consent of instructor. Painting, sculpture, and architecture in Europe during the eighteenth and nineteenth centuries. Dual-listed in the UALR Graduate Catalog as ARHA 5307. Three credit hours.

ARHA 4308 Twentieth-Century Painting, Sculpture, and Graphic Arts Since 1945
Prerequisite: ARHA 2311 or consent of instructor. Painting, sculpture, and graphic arts from 1945 to the present. Dual-listed in the UALR Graduate Catalog as ARHA 5308. Three credit hours.

ARHA 4309 History of Arkansas Architecture
Prerequisite: ARHA 2311 or consent of instructor. The development of architecture in Arkansas from its origins to the present. Dual-listed in the UALR Graduate Catalog as ARHA 5309. Three credit hours.

ARHA 4315 Modern Architecture
Prerequisite: ARHA 2305. A study of the major architectural developments in European and American architecture from 1900 to the present. The focus will be upon European architecture from 1900 to 1930, and upon architecture in the U.S. from 1930 to 1970. Consideration will be given to both technological innovations and to issues current in architectural design, such as preservation and adaptive reuse of historic buildings. Dual-listed in the UALR Graduate Catalog as ARHA 5315. Three credit hours.

ARHA 4384 Baroque Art
Prerequisite: ARHA 2311 or consent of instructor. Painting, sculpture, and architecture in northern Europe (the Netherlands, France), Spain, and Italy from 1600 to c. 1725. Dual-listed in the UALR Graduate Catalog as ARHA 5384. Three credit hours.

ARHA 4385 Seminar in Italian Renaissance and Baroque Art
Prerequisite: ARHA 2311 or consent of instructor. Directed research for advanced students on various problems of Italian Renaissance or Baroque art from c. 1300 to 1725. Taught by the seminar method. Three credit hours.

ARHA 4386 Problems in Northern European Renaissance and Baroque Art
Prerequisite: ARHA 2311 or consent of instructor. Directed research for advanced students on various problems of northern European art. Taught by the seminar method. Three credit hours.

ARHA 4387 Late Nineteenth- and Early Twentieth-Century Art in Europe
Prerequisite: ARHA 2311 or consent of instructor. Painting, sculpture, graphic arts, and architecture from the postimpressionist period until WW II. Dual-listed in the UALR Graduate Catalog as ARHA 5387. Three credit hours.

ARHA 4388 Problems in Modern Art
Prerequisite: ARHA 2311 or consent of instructor. Discussion of selected problems in painting, sculpture, or architecture of the eighteenth, nineteenth, or twentieth centuries. Taught by the seminar method. Three credit hours.

ARHA 4397 Capstone in Art History
Pre-requisite: 21 hours in art history, including ARHA 4300. Offered Fall and Spring. Required for art history majors. An independent research project under faculty guidance. The project must be presented in writing and orally. Normally taken in a student’s last semester. Three credit hours.

ARHA 4110, 4210, 4310 Special Topics in Art History
Prerequisite: consent of Department of Art faculty. Open only to superior students who seek to do special research on a topic selected in consultation with the instructor. One, two, or three credit hours.

ARHA 4191, 4291, 4391 Independent Study
Prerequisite: consent of Department of Art faculty. Open only to superior students who seek to do special research on a topic selected in consultation with the instructor. One, two, or three credit hours.
Courses in Studio Art – Fine Art Track (ARST)

Each studio art credit hour requires four clock hours of work each week. Two of these hours are scheduled and the additional hours occur outside of scheduled class time in the open studio workspace. Each studio is scheduled to be open for these additional hours.

The undraped human figure is a significant subject within the studio art curriculum.

**ARST 1310 Basic Drawing**
A beginning course in drawing with attention to the formal elements of shape, line, value, and texture; composition and perspective; drawing from still life, landscape, the figure (draped and undraped), and other subject matter. Three credit hours.

**ARST 1315 Two-Dimensional Design**
Introduction to concepts of design in visual art. Emphasis on two-dimensional forms. Recommended for non-art majors who want to take some studio art courses. Three credit hours.

**ARST 2310 Figure Drawing**
Prerequisite: ARST 1310. Introduction to figure drawing; emphasis on anatomy, composition, and orientation to media. The undraped human figure is the primary subject. Three credit hours.

**ARST 2315 Three-Dimensional Design**
Prerequisite: ARST 1315. Concepts of three-dimensional design. Emphasis on both form and content. Three credit hours.

**ARST 2318 Computer Applications in Art**
Problems in design utilizing computer technologies for the visual artist with an emphasis on proficiency in computer applications, design and computer-aided imagery. Three credit hours.

**ARST 3310 Drawing: Creative Invention**
Prerequisite: ARST 2310. An advanced course with emphasis on invention and personal creative investigation. Three credit hours.

**ARST 3312 Contemporary Crafts**
An introductory course introducing students to the four areas of Contemporary Craft: wood, metal, ceramics and fiber through demos and assignments. The course will focus on developing proper technique associated with each material, developing a personal design aesthetic through the making of one-of-a-kind objects as well as the development of a high level of craftsmanship. This course will require some use of hand and power tools while students develop items from each area. Three credit hours.

**ARST 3320 Painting Fundamentals 1**
Prerequisites: ARST 1310, 1315, or consent of instructor. An introduction to oil painting by working primarily from still life and landscape with emphasis on both representational and expressive approaches. Three credit hours.

**ARST 3321 Painting Fundamentals 2**
Prerequisite: ARST 3320, or consent of instructor. Continuation of previous study with emphasis on more complex and varied assignments. Three credit hours.

**ARST 3330 Printmaking Basics**
Prerequisites: ARST 1310 and ARST 1315. Introduction to basic woodcut, linoleum cut, etching, and lithography. Three credit hours.

**ARST 3331 Lithography Techniques**
Prerequisites: ARST 3330. A complete study in lithography using a variety of drawing media and methods to include Bavarian Limestone and aluminum plate processes. Three credit hours.

**ARST 3340 Introduction to Graphic Design**
Prerequisites: ARST 1310, 1315, 2318; or consent of instructor. Instruction in the aesthetic, creative, and technical aspects of graphic design. Focus is given to the application of the elements of art and the principles of design to graphic design solutions, as well as effective use of typography. Three credit hours.

**ARST 3341 Typography**
Prerequisite: ARST 3340 or consent of instructor. An exploration of the art and practice of type as a tool for visual communication; this course covers the history of typography, type anatomy, terminology, and technical handling. Critical thinking and problem solving skills will be encouraged with the practical application of design principles. Three credit hours.

**ARST 3360 Introduction to Sculpture**
Basic additive, subtractive and reproductive processes in problems using figurative clay modeling, stone carving, mold making, plaster casting, concrete casting and metal casting. Three credit hours.

**ARST 3361 Figurative Clay Sculpture**
Prerequisite: ARST 2310. Exploration of the human head and figure using basic additive and subtractive techniques. Students will sculpt from draped and undraped models in terra cotta clay to be fired. Three credit hours.

**ARST 3370 Introduction to Photography**
An introduction to the basic technical skills for black and white digital photography. The course also emphasizes the visual organization of an effective photograph. Prerequisite for all other photography courses. No previous experience is necessary, but students must provide their own single-lens-reflex digital camera. Three credit hours.

**ARST 3371 Intermediate Photography**
Prerequisite: ARST 3370. Exploration of current modes of photographic expression with an emphasis on content. Students continue to develop both their black and white technical skills and their ability to visually organize a photograph. Prerequisite to all advanced photography offerings. Three credit hours.

**ARST 3380 Introduction to Illustration**
Prerequisites: ARST 1310, 1315 and 2310. Instruction in the use of traditional media and visualization techniques for illustrative purposes. Projects encourage visual thinking skills using black and white and color media including wet and dry process with an emphasis placed on achieving technical proficiency. A variety of media and surfaces will be explored. Three credit hours.

**ARST 3381 Book Illustration**
Prerequisite: ARST 3380 or consent of instructor. Instruction in the production of artwork for the book publishing industry. Discussion topics and projects develop students’ skills in interpreting stories and manuscripts with unique visual imagery. Three credit hours.

**ARST 3385 Vector Graphics for Illustrators and Designers**
Prerequisite: ARST 1310, 1315 and 2318 or consent of the instructor. A study of computer illustration software covering the most popular vector illustration programs in use today. Emphasis on aesthetic judgment and technical proficiency in developing works of art for illustration and design portfolio. Three credit hours.

**ARST 3386 Digital Imaging for Illustrators and Designers**
Prerequisite: ARST 1310, 1315 and 2318 or consent of the instructor. Studio illustration and design techniques in Adobe Photoshop. Emphasis is placed on aesthetic judgment, technical proficiency and production techniques. Three credit hours.

**ARST 4310 Drawing: Concept Development**
Prerequisite: ARST 3310 or consent of instructor. Exploration of perceptual and conceptual issues in drawing, including study of contemporary artists and trends to stimulate self-directed projects. Three credit hours.
ARST 4311 Drawing: Contemporary Trends  
Prerequisite: ARST 4310 or consent of instructor. A continuation of issues introduced in ARST 4310. Students will continue to expand their work in the context of current issues, aesthetic trends, and the current cultural milieu. Three credit hours.

ARST 4312 Drawing: Personal Content  
Prerequisite: ARST 4311 or consent of instructor. The focus of this course is the continuation of previous research and self-directed study in drawing and preparation of works for the senior exhibition. Three credit hours. This course may be repeated once for an additional three credit hours.

ARST 4115, 4215, 4315 Advanced Problems in Design  
Experimental materials and techniques in two- and three-dimensional design, including the correlation of visual design elements with those of various multidimensional work not usually covered by normal course offerings. Course content, subtitle, and organization vary. One, two, or three credit hours.

ARST 4320 Painting: Personal Content I  
Prerequisite: ARST 3321, or consent of instructor. An introduction to self-directed study with emphasis on various painting concepts while focusing on the establishment of a personal direction in painting. Three credit hours.

ARST 4321 Painting: Personal Content II  
Prerequisite: ARST 4320, or consent of instructor. Continuation of previous research and self-directed study in painting emphasizing a more advanced level. Three credit hours.

ARST 4323 Painting: Personal Content III  
Prerequisite: ARST 4321, or consent of instructor. Continuation of previous research and self-directed study in preparation for the BFA Project and the Senior Exhibition. Three credit hours.

ARST 4324 Painting Portfolio  
Prerequisite: ARST 4323, or consent of instructor. Emphasis on the continuing creation of a body of work in preparation for advancement to the next academic level; graduate school, career, etc. Three credit hours.

ARST 4330 Color Intaglio-Etching Basics  
Prerequisites: ARST 3330. Exploration of intaglio-etching basic color separation processes and multiple-plate printing techniques. Three credit hours.

ARST 4331 Advanced Color Intaglio-Etching  
Prerequisite: ARST 4330. Instruction in advanced color etching-intaglio techniques to include traditional and current trends in printmaking. Three credit hours.

ARST 4332 Mixed Media Color Printmaking  
Prerequisite: ARST 4331. Instruction in advanced color techniques to reflect current trends and innovative approaches to printmaking. Three credit hours.

ARST 4340 Print Design  
Prerequisite: ARST 3341 or consent of instructor. Advanced graphic design practice with exploration of 3-D forms and surface graphics. Students encounter design problems outside the scope of traditional print layouts by designing containers, point-of-purchase, and prototypes. Three credit hours.

ARST 4341 Package Design  
Prerequisite: ARST 4340 or consent of instructor. Advanced graphic design theory with emphasis on work assignments from clients in the community and creation of a portfolio for employment. Three credit hours.

ARST 4348 Production Design for the Internet  
Prerequisite: ARST 3356 or consent of the instructor. A study of computer software as tools for the graphic designer in the web design industry. Students complete a series of projects illustrating the different design and production capabilities of individual software programs and their interrelationships. Students produce a variety of projects, from small scale graphics to complete web sites. Three credit hours.

ARST 4360 Metal Casting Techniques  
Prerequisite: ARST 3360. Design and assembly of small and large-scale functional objects and sculpture to cast in metal. Class focuses on complete process from inception of design to finished cast product. Different casting, pattern making, spruing, and patina finishing techniques are explored. Three credit hours.

ARST 4361 Stone Carving Techniques  
Prerequisite: ARST 3360. Explore the basics of stone carving through making a clay model, then transcribing that model into stone using hand tools, electrical power tools, air tools and finishes to realize a concept. Three credit hours.

ARST 4362 Concrete Casting and Building  
Prerequisite: ARST 3360. Explore basic techniques of building armatures for concrete fabrication; methods and materials for concrete casting; researching additives for structural strength; coloring agents for surface and body coloration with stains and paints; basic fabrication techniques for model building; and design approaches for assembly of small and large scale functional objects and sculpture. Three credit hours.

ARST 4363 Metal Welding and Fabrication  
Prerequisite: ARST 3360. Explore basic techniques of welding using oxy-acetylene, electric arc, TIG, MIG; cutting methods using plasma torch and oxy-acetylene; basic fabrication techniques for model building; and design approaches for assembly of small and large scale functional objects and sculpture. Three credit hours.

ARST 4370 Professional Photo Techniques  
Prerequisites: ARST 3370, ARST 3371. Overview of portrait and commercial photography with an emphasis on studio lighting techniques. Three credit hours.

ARST 4371 Alternative Photo Methods  
Prerequisites: ARST 3370, ARST 3371. Exploration of alternative methods of photographic image making. Assignments challenge each student to question traditional techniques and materials. Three credit hours.

ARST 4372 Digital Color Photography  
Prerequisites: ARST 3370, ARST 3371. Introduction to digital color photography with an emphasis on the technical skills required. Students explore the theory and expressive uses of color as it pertains to photography. Three credit hours.

ARST 4373 Advanced Problems in Photography  
Prerequisites: ARST 4370, ARST 4371, ARST 4372 or permission of the instructor based upon demonstrated equivalent experience. The further exploration of concepts introduced in other photography courses. Individual assignments based on each student’s previous experience and interest. May be repeated for additional credit. Three credit hours.

ARST 4374 Large-Format Photography  
Prerequisites: ARST 3370, ARST 3371. Introduction to large-format photographic techniques and aesthetics. Camera and accessories are provided by the department. Three credit hours.

ARST 4380 Concept Illustration  
Prerequisite: ARST 3381 or consent of instructor. Instruction in the production of conceptual artwork for the movie and videogame industry. Discussions and projects include preliminary work, visualization methods and the creation of artwork in both traditional and digital media. Three credit hours.

ARST 4381 Editorial Illustration  
Prerequisite: ARST 3380 or consent of instructor. Instruction in the production of conceptually based artwork for editorial publication. Discussion topics include visual problem solving with individual and expressive imagery. Hands-on projects allow for a variety of approaches to the creation of finished artwork. Three credit hours.
ARST 4192, 4292, 4392 Independent Study
Open only to the advanced student who seeks to do special research on a subject selected in consultation with the instructor. Admission to this course must be approved by the art department before registration. One, two, or three hours credit.

ARST 4394 BFA Thesis Project 1
Prerequisites: Completion of 4000 level coursework in emphasis area and acceptance to BFA Program. First term of advanced research, concept development and art production in the student’s concentration area. Students develop independent projects supervised by thesis advisor and meet with BFA peers at regular intervals for critique and discussion. Specific course requirements are contracted with the BFA thesis adviser. Cannot be taken concurrently with BFA Thesis Project 1. Three credit hours.

ARST 4395 BFA Thesis Project 2
Prerequisites: Completion of 4000 level coursework in emphasis area, acceptance to BFA Program and BFA Thesis Project 1. Final term of advanced research, concept development and art production in the student’s concentration area. Students continue to meet with Faculty and BFA peers at regular intervals for critique and discussion. Specific course requirements are contracted with the BFA thesis adviser. Final requirements include a portfolio of work, artist’s statement and an exhibition of the thesis project work in a format appropriate to the subject area. Cannot be taken concurrently with BFA Thesis Project 1. Three credit hours.

ARST 4397 Capstone: Studio Art
This course provides the capstone experience for senior art studio majors. Course includes career analysis, gallery portfolio presentation, photographing art, packing and shipping art, a mock interview or a project proposal presentation and the development of a resume, an artist statement and a gallery talk. Three credit hours.
The Department of English offers instruction in literature, linguistics, and creative writing. The creative writing courses are intended for students who wish to develop sophisticated writing skills. The department’s linguistics courses offer instruction in the scientific study of language. The literature program includes such varied subjects as African-American literature, film, Shakespeare, and short fiction. These courses are intended not only for English majors and minors but also for students preparing for careers in such fields as law, business, government, and medicine. Through rigorous assessment, the English department maintains current and relevant programs.

General Information

William G. Cooper, Jr., Honors Program in English

The William G. Cooper, Jr., Honors Program in English is sustained by an endowment created by the family of Dr. William G. Cooper, Jr., in honor of his distinguished service on the Little Rock University Board of Trustees and UALR Board of Visitors.

The William G. Cooper, Jr., Honors Program in English is an option in the English major available to exceptional students. A student with a solid GPA and a particular interest in English may apply for the program any time after completing 45 hours of course work. Students accepted in the honors program are invited also to apply for one of the stipends provided by the William G. Cooper, Jr., endowment.

The honors option in English has 33 hours of course work, which includes the 16 hours required for all English majors: ENGL 3331 and 3332; 3311 or 3312; 3321 or 3322 or 3323; 3330; and 4199. Cooper Honors students must take ENGL 4260 (Honors tutorial), ENGL 4270 (Honors project), and ENGL 4350 (Cooper Honors seminar). This seven-hour block counts towards the upper-level English electives required to fill out the 33 hours of course work for the major. The honors courses comprise intensive learning projects, in-depth discussion, and closely directed research projects.

Students in the program must maintain a 3.25 GPA overall and a 3.5 GPA in their English courses to remain in good standing.

Bachelor of Arts in English

Core Requirements (44 hours)

Second Language Proficiency

Emphasis in English (33 hours)

ENGL 3330 Approaches to Literature
ENGL 3331 Major British Writers I
ENGL 3332 Major British Writers II
ENGL 3311 History of the English Language
or ENGL 3312 Grammatical Analysis of Modern English
ENGL 3321 American Literature I
or ENGL 3322 American Literature II
or ENGL 3323 American Literature III
ENGL 4199 Career Perspectives

Upper-level English electives (17 hours—up to six hours may be applied from ENGL 4100 Independent Study, ENGL 4200 Independent Study, or ENGL 4390 Internship)
Major in English with a Creative Writing Emphasis (33 hours)

Prerequisite for upper-level creative writing classes: ENGL 2336 Introduction to Creative Writing

English majors who wish to emphasize creative writing must take the six courses required for the English major and the following upper-level courses:

- ENGL 3318 Fiction Writing I
- or ENGL 3319 Poetry Writing I
- ENGL 4398 Fiction Writing II
- or ENGL 4399 Poetry Writing II
- ENGL 3346 Form and Theory of Fiction
- or ENGL 4369 Form and Theory of Poetry

One additional upper-level creative writing workshop course: this could be ENGL 3318 (Fiction Writing I), ENGL 3319 (Poetry Writing I), ENGL 3320 (Screenwriting), ENGL 4398 (Fiction Writing II), ENGL 4399 (Poetry Writing II), or ENGL 4301 (Advanced Creative Writing Project)

One upper-level course in twentieth-century literature
Two additional hours of upper-level English courses

Students may retake an upper-level creative-writing workshop class one time (but no more).

Minor in English (18 hours)

A minor in English requires 18 hours. These hours may include either ENGL 2337 World Literature or ENGL 2338 World Literature Themes; the remaining hours must be upper-level courses in English.

Minor in Creative Writing (18 hours)

A minor in creative writing requires 18 hours selected from the creative writing course list. Three of these hours may include ENGL 2336 (Introduction to Creative Writing).

Minor in Linguistics (21 hours)

A minor in linguistics requires 21 hours, including ENGL 3313, at least nine hours of linguistics courses chosen from ENGL 3311, 3312, 3314, and 4370 or 4100/4200 when the topic is in linguistics, up to six hours of foreign language elective courses, and up to nine hours of approved elective coursework chosen from ANTH 4316; AUSP 3360, AUSP 4366; PHIL 3320; PSYC 2310, PSYCH 2341, PSYCH 2340; and SOCI 2181, SOCI 2381.

Minor in Film (18 hours)

The English Department participates in an interdisciplinary minor in film. Minors must take MCOM 2306 Introduction to Motion Pictures, and 15 hours of film courses in at least two disciplines. Interested students should consult the School director or the film coordinator in the School of Mass Communication.

Secondary Teacher Licensure

See “Secondary Teacher Licensure” for details.

Courses in Literature (ENGL)

ENGL 2335 Introduction to Literature
For the beginning student of literature. Topics vary and include selections from poetry, fiction, and drama. Three credit hours.

ENGL 2337 World Literature
Prerequisite: completion of the first year writing requirement. Study of selected texts reflecting various Western and non-Western literary heritages and traditions. Assigned works represent several national literatures, with at least one major text from each of four periods (antiquity, medieval, early modern, and the modern period) and from a minimum of three literary genres. Three credit hours.

ENGL 2338 World Literature Themes
Prerequisite: completion of the first year writing requirement. This class addresses the same competencies as ENGL 2337, but through exploration of a specific topic. Either 2337 or 2338 satisfies the core requirement, but they are distinctive courses and both may be taken for credit. Three credit hours.

ENGL 2339 Mythology
An introduction emphasizing Greek and Roman mythology and its influence on Western culture. Three credit hours.

ENGL 3321 American Literature I
Selected works from the earliest writings to American romanticism. Three credit hours.

ENGL 3322 American Literature II
Selected works from the period beginning with the romantic movement and ending with the Civil War. Three credit hours.

ENGL 3323 American Literature III
Selected works from the period beginning with the Civil War and ending in 1912. Three credit hours.

ENGL 3324 Arkansas Writers
A survey of Arkansas writers of the nineteenth and twentieth centuries. Three credit hours.

ENGL 3325 Literature of the South
Presentation of representative southern writers. Emphasis on writers of the southern renaissance of the twentieth century. Three credit hours.

ENGL 3326 African-American Literature I
African Americans in American culture from the colonial period to the twentieth century as expressed through the literary works of African-American writers. Three credit hours.

ENGL 3327 African-American Literature II
The writings of representative African American authors from 1900 to the present, with emphasis on the literature of Africa, the West Indies, and African-America. Three credit hours.

ENGL 3330 Approaches to Literature
Required for English majors. The course introduces the basics of literary research, critical methods, and critical writing. Though not a prerequisite for any other English course, students are strongly recommended to take this class early. Three credit hours.

ENGL 3331 Major British Writers I
Major writers of English literature to the mid-eighteenth century, including Chaucer, Shakespeare, and Milton. Three credit hours.

ENGL 3332 Major British Writers II
Major writers of English literature from the mid-eighteenth century to the present. Three credit hours.

ENGL 3340 Women in Literature
Literature by and about women, with emphasis on works by nineteenth- and twentieth-century writers. Three credit hours.

ENGL 3344 Modern Drama
A close analysis of selected British, American, and European plays. Three credit hours.
ENGL 3346 The Form and Theory of Fiction
Survey of the forms, techniques, and theories of fiction, emphasizing the views of fiction writers. Three credit hours.

ENGL 3360 Selected Topics in Literature
Special topics in literature, varying each semester. Topics cross geographic and temporal lines and usually deal with a specific genre or a theme. Three credit hours.

ENGL 3361 The Film as Literature
An introduction to the capabilities of film as literature, using many genres as illustration. Three credit hours.

ENGL 3370 Fundamentals of Folklore
The folklore process among Americans and other cultural groups. The dynamics of the folk event, the theory and applications of folklore, and practical field experience. Three credit hours.

ENGL 4100, 4200 Independent Study
Prerequisites: senior standing and 18 hours of English. Open to English majors only. For the student of superior ability who seeks special research in the field. One or two credit hours.

ENGL 4150, 4250 Honors Seminar
Prerequisite: consent of program director. Focused study of topics in language and literature. One or two credit hours.

ENGL 4160, 4260 Honors Tutorial
Prerequisite: consent of program director. Independent study of topics in literature and language. One or two credit hours.

ENGL 4199 Seminar in Career Perspectives
Required for majors. A capstone course for English majors for purposes of developing and assessing their career, educational, and personal goals. One credit hour.

ENGL 4202 Teaching Literature in Secondary Schools
A methods course taught by faculty from the Departments of English and Rhetoric and Writing. Topics to be addressed include making classroom presentations, managing small-group work, responding to student writing, evaluating and using secondary school literature and composition textbooks, approaches to teaching literature, and writing as a way to reading. To be taken in conjunction with RHET 4202. Dual-listed in the UALR Graduate Catalog as ENGL 5202. Two credit hours.

ENGL 4270 Honors Project
Prerequisite: consent of program director. Honor projects are typically scholarly or creative works. Program advisors and director must approve all projects. Two credit hours.

ENGL 4311 Medieval Literature
Students will discuss, analyze, and research works in English literature from A.D. 450 to 1500 as well as works in translation from medieval German, Latin, and romance literature. Students with credit for ENGL 4311 may take ENGL 5311 with instructor approval. Three credit hours.

ENGL 4312 Chaucer
Selected works including Troilus and Criseyde and The Canterbury Tales. Three credit hours.

ENGL 4313 Arthurian Literature
A study of Arthurian chronicle and romance from Celtic beginnings through Malory, with examination of nineteenth- and twentieth-century developments of the legend. Three credit hours.

ENGL 4314 Topics in Medieval and Renaissance Literature
Students will discuss, analyze and research selected topics in medieval and Renaissance literature. Students with credit for ENGL 4314 may enroll in ENGL 5314 with instructor’s approval. Three credit hours.

ENGL 4321 English Renaissance Drama
Major playwrights, including Marlowe, Kyd, Jonson, Beaumont, Fletcher, and Webster; excluding Shakespeare. Three credit hours.

ENGL 4324 Shakespeare
Selected works, including the major comedies and tragedies. Three credit hours.

ENGL 4325 Teaching Shakespeare Through Performance
Pedagogical focus on teaching plays, particularly Shakespeare’s, in the elementary and secondary schools by using performance activities. Special emphasis on the four most often taught Shakespearean plays (Romeo and Juliet, Julius Caesar, Macbeth, Hamlet); one comedy and one history play included but titles may change each time the course is offered. Dual-listed in the UALR Graduate Catalog as ENGL 5325. Three credit hours.

ENGL 4328 Seventeenth-Century Literature
English poetry and prose from 1600 to 1660, with emphasis on Donne and Milton. Three credit hours.

ENGL 4331 Restoration and Early Eighteenth-Century Literature
Restoration drama; Dryden, Swift, early Pope. Three credit hours.

ENGL 4332 Mid and Late Eighteenth-Century Literature
Later Pope, the novel, Johnson. Three credit hours.

ENGL 4341 Romantic Poetry
Representative works of Blake, Coleridge, Wordsworth, Byron, Keats, and Shelley. Three credit hours.

ENGL 4343 Victorian Literature
Representative writers, including Tennyson, Browning, Arnold, and Hopkins. Three credit hours.

ENGL 4345 Topics in Nineteenth-Century Literature
Students will discuss, analyze, and research selected topics in British and American literature of the nineteenth century. Students with credit for ENGL 4345 may enroll in ENGL 5345 with instructor approval. Three credit hours.

ENGL 4350 Honors Seminar
This course is a focused examination of a variety of special topics in language and literature. Three credit hours.

ENGL 4351 British Novel I
Representative readings in the development of the British novel in the eighteenth and nineteenth centuries. Three credit hours.

ENGL 4352 British Novel II
Representative readings in the development of the British novel in the twentieth century. Three credit hours.

ENGL 4355 Readings in European Fiction
Representative readings in European fiction from the eighteenth century to the present. Three credit hours.

ENGL 4360 Topics in Modern Literature
Selected topics in modern literature. Three credit hours.

ENGL 4364 Modern Poetry
Representative readings in modern English and American poetry including works by Hopkins, Yeats, Frost, and Eliot. Three credit hours.

ENGL 4365 Modern Novel
Reading of American and British novels of the Modernist period. Three credit hours.

ENGL 4366 Contemporary Literature
Students will discuss, analyze, and research the major trends in fiction, poetry, and drama since 1945, with emphasis on British, American, and European writers. Students with credit for ENGL 4366 may enroll in ENGL 5366 with instructor approval. Three credit hours.

ENGL 4367 Short Story Survey
Wide reading of American and foreign short fiction. Three credit hours.
ENGL 4368 Literary Criticism
Students will discuss, analyze, and research the major literary theories, with emphasis on recent issues. Three credit hours.

ENGL 4369 The Form and Theory of Poetry
Survey of the forms, techniques, and theories of poetry, emphasizing the views of poets. Three credit hours.

ENGL 4370 Seminar in Language or Literature
Prerequisites: senior standing and consent of instructor. Selected topics in language or literature. May be repeated when topic differs. Three credit hours.

ENGL 4371 Advanced Folklore: Selected Topics
Selected topics such as native American traditions, folklore in Arkansas, trickster motifs in oral and written story. Three credit hours.

ENGL 4375 Adolescent Literature
In this course, students will read and discuss a wide variety of adolescent novels and adolescent short fiction (some written specifically for adolescents; others written from an adolescent perspective). Students with credit for ENGL 4375 may not take ENGL 5375. Three credit hours.

ENGL 4380 Studies in Major American Writers
The study of one major figure in American literature. Subject varies. Three credit hours.

ENGL 4381 American Fiction
Representative readings in the development of American fiction. Three credit hours.

ENGL 4384 American Poetry
Representative readings in American poetry from the beginnings to 1912. Three credit hours.

ENGL 4390 Internship
Prerequisites: junior standing, consent of instructor. Provides practical experience in a professional setting. Students work in a business, school, state agency, or similar location that offers opportunities to apply their academic background and skills. Course may be repeated for credit. Three credit hours.

**Courses in Creative Writing (ENGL)**

Creative writing courses (except ENGL 2336) may be repeated for credit one time.

ENGL 2336 Introduction to Creative Writing
Prerequisites: RHET 1311, 1312, or consent of instructor. Study and practice in the writing of fiction, poetry, and drama. Class discussion/workshop. Three credit hours.

ENGL 3318 Fiction Writing I
Prerequisite: ENGL 2336 or consent of instructor. Study and practice in the writing of fiction. Class discussion/workshop and individual conferences. Three credit hours.

ENGL 3319 Poetry Writing I
Prerequisite: ENGL 2336 or consent of instructor. Study and practice in the writing of poetry. Class discussion/workshop and individual conferences. Three credit hours.

ENGL 3320 Screenwriting
Prerequisite: ENGL 2336. Individual work in dramatic writing for film and television. Class discussion and individual conferences. Three credit hours.

ENGL 3346 The Form and Theory of Fiction
See literature course listing.

ENGL 4301 Advanced Creative Writing Project
Prerequisites: three creative writing classes or consent of instructor. Independent study in the writing of fiction, poetry, or drama. Three credit hours.

**Courses in Language and Linguistics (ENGL)**

ENGL 2311 Vocabulary Building
Study of Greek and Latin origins and word families. Three credit hours.

ENGL 3311 History of the English Language
Development of the English language from the Old English period to the present. Three credit hours.

ENGL 3312 Grammatical Analysis of Modern English
Studies in the structure of modern English. Three credit hours.

ENGL 3313 Introduction to the Study of Language
An introductory linguistics course. Includes phonology, syntax, and semantics. Three credit hours.

ENGL 3314 Social and Regional Dialects
A study of English dialects and the dynamics of dialectic variation and use. Three credit hours.

ENGL 4100, 4200 Independent Study
Prerequisites: senior standing, 18 hours of English. Open to English majors only. For the student of superior ability who seeks special research in the field. One or two credit hours.

ENGL 4202 Teaching Literature in Secondary Schools
A methods course team-taught by faculty from the Departments of English and Rhetoric and Writing. Topics to be addressed include making classroom presentations, managing small-group work, responding to student writing, evaluating and using secondary school literature and composition textbooks, approaches to teaching literature, and writing as a way to reading. To be taken in conjunction with RHET 4202. Dual-listed in the *UALR Graduate Catalog* as ENGL 5202. Two credit hours.

ENGL 4325 Teaching Shakespeare Through Performance
Pedagogical focus on teaching Shakespeare’s plays in elementary and secondary schools by using performance activities. Special emphasis on Romeo and Juliet, Julius Caesar, Macbeth, and Hamlet. One comedy and one history play included by titles, may change each time the course is offered. Dual-listed in the *UALR Graduate Catalog* as ENGL 5325. Three credit hours.

ENGL 4370 Seminar in Language or Literature
Prerequisites: senior standing, consent of instructor. Selected topics in language or literature. May be repeated when topic differs. Dual-listed in the *UALR Graduate Catalog* as ENGL 5370. Three credit hours.
The History Department program is designed to implement the following objectives:

- to prepare undergraduate majors for advanced training in history,
- to train students to teach in the secondary schools,
- to provide instruction for the University’s core Courses in Literature (ENGL) curriculum program, and to actively engage with the wider community and to promote awareness of public history.

The History Department is committed to the on-going process of assessing the effectiveness of our programs and courses.

General Information

Major in History

The history major must complete Core Requirements (44 hours), Secondary Language Proficiency, and 36 credit hours of history, including HIST 1311, 1312, 2311, 2312, and at least 24 hours of upper-level history courses which must include HIST 4309. All students who are history majors must have C or better in HIST 1311, 1312, 2311, 2312, or equivalent courses. The program must include at least six upper-level hours of United States history and at least six upper-level hours of non-United States history. Additionally, history majors with senior status (90 or more hours including UALR and transfer work) must take at least one three-hour capstone experience seminar prior to graduation.

All students are advised to take HIST 1311 and 1312 before taking upper-level courses in European history and HIST 2311 and 2312 before taking upper-level courses in American history. Students preparing to study history beyond the bachelor’s degree level are strongly advised to master at least one foreign language before graduation. Students preparing for advanced work should seek specific advising from a member of the department at their earliest opportunity.

Minor in History

A minor in history requires 18 hours, including HIST 2311, 2312, and 12 hours of upper-level history courses.

Secondary Teacher Licensure

See “Secondary Teacher Licensure.” for details or consult the History Department Web Site.

History Honors Program

To graduate with Honors from the History Department, a student must have a 3.25 overall grade point average and a 3.5 in History courses. Honors students must also complete an Honors Thesis; students will take an Honors Thesis course (HIST 4322) that involves individual work with a faculty member, is worth 3 credit hours, and will count as part of the 36 hour requirement for the History Major. The thesis will be a research project done under the direction of one faculty member, and the topic must be approved by a Thesis Committee consisting of that faculty member and two others. A recommendation by the Thesis Committee is required for the student to graduate with Honors.
BACHELOR OF ARTS IN HISTORY

Core Requirements (44 hours)

Second Language Proficiency

Required Courses (36 hours)
- HIST 1311 History of Civilization I
- HIST 1312 History of Civilization II
- HIST 2311 U.S. History to 1877
- HIST 2312 U.S. History since 1877

24 Upper-Level History Courses, as follows
Upper-Level Electives (6 hours)
Upper-Level United States History (6 hours)
Upper-Level Non-United States History (6 hours)
HIST 4309 The Historian’s Craft (3 hours)
Senior Capstone Seminar (3 hours)
Minor (18 hours)

Other Programs

Minor in Geography
Jess C. Porter, Coordinator

A geography minor consists of 18 hours, including 1311 Introduction to Physical Geography and 2312 Cultural Geography, plus 12 additional hours of geography courses. For more information, contact the coordinator at (501) 569-8730.

The following courses in geography may be used to complete the geography minor, to meet core curriculum requirements, and to meet part of the bachelor of arts in liberal arts program requirements.

Minor in Race and Ethnicity
John Kirk, PhD, Chair and Donaghey Professor, History
Adjoa A. Aiyetoro, Director, Institute on Race and Ethnicity
Advisors: John Kirk, PhD. | John W. Miller, Jr. PhD

UALR History Department in Conjunction with the UALR Institute on Race and Ethnicity offers a minor in Race and Ethnicity.

- Required courses (6 hours)
  - RACE 2301 – Introduction to Race and Ethnicity
  - HIST/RACE 4356/5356 – History of Race and Ethnicity in the United States

  [Beginning 2012 – 2013 Academic year RACE 2301 will be offered in the fall semester and RACE/HIST 4356/5356 will be offered in the spring semester.]

Elective courses (12 hours selected from the list below)
- ANTH 3312 North American Indians
- ANTH 4398 Race and Human Variation
- CRJU 3310 Race, Ethnicity, and Crime
- GEOG 2312 Cultural Geography
- MCOM 4384 Special Topics: Images of Minorities in the Media
- ENGL 3326 African American Literature I
- ENGL 3327 African American Literature II
- ENGL 4350 Black Women’s Activism and Literature
- SOCI 3340 Experiences of Black Americans
- SOCI 3330 Minority Groups
- SOCI 4395 Special Topics: Native American History
- HIST 3355 American Civil War and Reconstruction 1848-1876

HIST 3371 Colonial Latin America
HIST 3380 The Indian in American History
HIST 4327 Africa in World History
HIST 4328 South Africa in World History
HIST 4338 Holocaust
HIST 4358/5358 Civil Rights Movement Since 1954
HIST 4368 African American History to 1865
HIST 4369 African American History from 1866
HIST 4378 The History of U.S.-Latin America Relations
PHIL 4373 Philosophy of Race
MGMT 4391 Employment Law
MUHL 3361 Jazz History and Styles
SPAN 3335 Las Culturas de Las Americas
SPCH 4312 Intercultural Communication

Courses in Geography (GEOG)

GEOG 1311 Introduction to Physical Geography
Study of earth/sun relationships that produce the elements of weather, including temperature, precipitation, atmospheric pressure, and air circulation. Patterns of climate and their interrelationship with soil and vegetation systems. Study of major landform processes, which shape the earth’s surface, with specific reference to North America. Three credit hours.

GEOG 2310 World Regions
World regional patterns of population, natural resources, and economic activities with reference to the nature of regions and their characteristics. Regional patterns of Europe, North America, Latin America, Africa, and East and South Asia. Three credit hours.

GEOG 2312 Cultural Geography
The nature, distribution, and development of various cultural systems as they interact with each other and with their environment. A study is made of spatial patterns in the elements of culture, including population, religion, language, political ideology, economic activities, and settlement. Examination of the processes that have changed the natural landscape to a cultural landscape. Three credit hours.

GEOG 2320 Introduction to Geospatial
Technologies This course is designed to introduce a range of spatially-oriented technologies. In this class you will learn about a variety of geotechnology and gain hands-on experience using it. Geotechnologies include the global positioning system (GPS), satellite imagery, and geographic information systems (GIS). Students will be exposed to practical applications of these technologies that span both physical and social science realms. Three credit hours.

GEOG 3301 Geography of Europe
This course examines and analyzes the cultural and environmental geography of the European region. Topics include the geodemography of Europe with special attention placed on the challenges posed by low regional birth rates and high immigration, the opportunities and constraints associated with the uneven distribution of natural resources, and the paradox of ongoing regional integration and fragmentation in light of historical and contemporary geographic contexts. Three credit hours.

GEOG 3305 Environmental Conservation
Survey of the human environment with resources. Examination of major resources and their use with reference to North America and to Arkansas. Three credit hours.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 3307</td>
<td>Geography of Food</td>
<td>This course will focus on the importance of place and geography in the production, distribution and consumption of food. The role of culture and environment are critical in understanding why, what, how much, and where we eat. In the United States, we are increasingly removed from the farm and reliant upon processed foods, so understanding and appreciating the place of food becomes increasingly critical. Geographic concepts like nature-society relationships, spatial interconnections and patterns, and site and situation, will be applied to help us understand why food is produced and consumed where it is, by whom, and the changing nature of these relationships.</td>
</tr>
<tr>
<td>GEOG 3315</td>
<td>Geography of Arkansas</td>
<td>Study of Arkansas’ natural and cultural environments with emphasis on how various groups, past and present, interact with the state’s natural regions. Geologic, climate, soil, and vegetation patterns are examined. Settlement patterns; economic activities, including agriculture, forestry, mining, and industry; and population distributions are analyzed and placed together with the state’s natural regions. Three credit hours.</td>
</tr>
<tr>
<td>GEOG 3320</td>
<td>Urban Geography</td>
<td>Study of the urban landscape and the specific land uses found in United States cities. Current geographic pattern of industrial, commercial, residential, public, and recreational activities in our cities with reference to Arkansas. Three credit hours.</td>
</tr>
<tr>
<td>GEOG 4321</td>
<td>Geomorphology</td>
<td>See ERC 4321. Dual listed in the UALR Graduate Catalog as GEOG 5321. Three credit hours.</td>
</tr>
<tr>
<td>GEOG 4300</td>
<td>Special Topics</td>
<td>Prerequisites: consent of instructor, nine hours of geography or an associated discipline that complements the seminar topic. Topics will be chosen on the basis of contemporary interest and demand and will be focused to provide an in-depth understanding of the issue. Dual listed in the UALR Graduate Catalog as GEOG 5300. Three credit hours.</td>
</tr>
<tr>
<td>GEOG 4311</td>
<td>History and Philosophy of Geography</td>
<td>Investigates the ways in which the subject of geography has been recognized, perceived, and evaluated, from its early acknowledgment in ancient Greece to its disciplined form in today’s world of shared ideas and mass communication. Includes an assessment of current geographic research. Three credit hours.</td>
</tr>
<tr>
<td>GEOG 4290, 4390</td>
<td>Independent Study</td>
<td>Prerequisites: 15 hours of geography including GEOG 1311, 2312, and consent of instructor. Research and reading in various areas of geography. Projects reflect student interest and career objectives along with departmental emphasis. Two or three credit hours.</td>
</tr>
<tr>
<td>GEOG 4397</td>
<td>Social Studies Teaching Applications</td>
<td>Social studies content linked with practical applications for classroom instruction. Content from history, geography, political science, sociology/anthropology, and psychology. Content modeled for prospective secondary education teachers to illustrate how content can be applied in the classroom. Critical components of each of the disciplines integrated into the content presentations and the demonstrated applications. Team taught. Three credit hours.</td>
</tr>
</tbody>
</table>

**Courses in History (HIST)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1311</td>
<td>History of Civilization I</td>
<td>Recommended prerequisite: RHET 1311. The history of the world’s significant civilizations from their beginnings to approximately AD 1600: the development of integrated political, social, economic, religious, intellectual, and artistic traditions and institutions within each of those cultures; significant intercultural exchanges. Three credit hours.</td>
</tr>
<tr>
<td>HIST 1312</td>
<td>History of Civilization II</td>
<td>Recommended prerequisite: RHET 1311. The history of the world’s significant civilizations since approximately AD 1600: examination of the persistence of traditional civilizations and the changes in the world order due to the development of modern industrial society, modern science, and the nation state. Three credit hours.</td>
</tr>
<tr>
<td>HIST 1314</td>
<td>First-Year Colloquium in History</td>
<td>This course introduces students to the discipline of history through examining of a single topic chosen by the professor. Students will also learn basic research skills, gain experience in time management, and carry out a long-term group project. Furthermore, students will use the insights gained in the classroom to engage with the community around them through a service-learning project. Three credit hours.</td>
</tr>
<tr>
<td>HIST 2311</td>
<td>U.S. History to 1877</td>
<td>Description, analysis, and explanation of the major political, social, economic and diplomatic events through “Reconstruction.” Special attention is devoted to the cross-cultural development of three civilizations, Native American, European, and African, within the geographical context of the North American continent. Major topics for study include European colonial empires; the American Revolution; the Constitution of 1787; evolution of a national government, federal in system and republican in form; social and economic theories and practices; relationship with foreign governments; and the American Civil War. Three credit hours.</td>
</tr>
<tr>
<td>HIST 2312</td>
<td>U.S. History since 1877</td>
<td>Description, analysis, and explanation of the political, social, economic and diplomatic events to the present time. Special attention is devoted to the forces of Modernity and the impact of cultural pluralism on traditional institutions. Major topics for study include industrialization; agrarianism; labor; immigration; reform movements; total and limited war; economic theory and practice; and the U.S.’s role in world affairs. Three credit hours.</td>
</tr>
<tr>
<td>HIST 3301</td>
<td>Ancient History and Thought</td>
<td>Social, intellectual, and cultural history of ancient Mesopotamian, Egyptian, Greek, and Roman peoples. Three credit hours.</td>
</tr>
<tr>
<td>HIST 3302</td>
<td>History of Ancient Greece</td>
<td>A political, constitutional, and social history of Greece from the Homeric Age to the fall of the Athenian Empire in 404 BC. Three credit hours.</td>
</tr>
<tr>
<td>HIST 3303</td>
<td>The Hellenistic Age</td>
<td>The study of Greek civilization from the fall of the Athenian Empire (404 BC) through the reign of Alexander the Great to the collapse of his successors’ kingdoms before the advance of Rome (c. 146 BC). Three credit hours.</td>
</tr>
<tr>
<td>HIST 3304</td>
<td>History of the Roman Republic</td>
<td>The history of the expansion of the city of Rome from a small village on the banks of the Tiber to a world empire. Three credit hours.</td>
</tr>
<tr>
<td>HIST 3305</td>
<td>The History of the Roman Empire</td>
<td>A history of the Roman Empire from the reign of Augustus and the rise of Christianity to the end of antiquity. Three credit hours.</td>
</tr>
<tr>
<td>HIST 3312</td>
<td>History of Medieval Civilization</td>
<td>A study of the interaction of the social class structure and Christianity in forming the institutions of medieval civilization (c. AD 1000-1350). Three credit hours.</td>
</tr>
<tr>
<td>HIST 3313</td>
<td>The Renaissance, 1300-1550</td>
<td>A study of urban and court life at the time of the Renaissance. Examines such themes as humanism, the arts, discovery, and gender issues in Italy and northern Europe. Three credit hours.</td>
</tr>
</tbody>
</table>
HIST 3315 Early Modern Europe, 1600-1815
Survey of major developments from the Thirty Years’ War through the French Revolution. Examines the role of international conflict, national state building, commercialization, the scientific revolution, and the enlightenment in the formation and disintegration of the Old Regime. Three credit hours.

HIST 3316 Europe in the Age of Revolution, 1789–1914
Survey of European history from the French Revolution to the outbreak of the First World War. Emphasis on revolutionary movements, nationalism, industrialization, class society, and imperialism. Three credit hours.

HIST 3317 Twentieth-Century Europe
World War I and its consequences; depression; totalitarianism; World War II; the reconstruction of Europe; the Cold War. Three credit hours.

HIST 3321 History of Britain to 1688
The period from the earliest times to the Glorious Revolution. Three credit hours.

HIST 3322 History of Britain since 1688
The period from the Glorious Revolution to the present. Three credit hours.

HIST 3323 British Empire
The political, social, and economic development of the British Empire, the foundations of the Commonwealth, and the emergence of the dominions and the dependent empire as autonomous units with the Commonwealth. Three credit hours.

HIST 3325 History of Russia to 1917
History of Russia from prehistoric origins through Kiev, Muscovite, and Tsarist periods with consideration of political, intellectual, economic, and religious factors. Emphasis on Tsarist policies. Three credit hours.

HIST 3326 The Soviet Union and Russia since 1917
Survey of major social, political, and cultural developments including the Russian Revolution, Stalinism, the Cold War, everyday life, the collapse of the Soviet Union, and the post-Soviet era. Three credit hours.

HIST 3328 Modern France
The French political community from the Old Regime to the Fifth Republic, with emphasis on the interrelationship of politics, class, and culture. Three credit hours.

HIST 3330 Early Modern Germany 1495–1806
Survey of the major social, political, and cultural developments in Germany from the Reformation to the French Revolution. Topics include political fragmentation and intra-German conflict, religious conflict, absolutism, the Enlightenment, the collapse of the Holy Roman Empire as well as everyday life, art, and literature. Three credit hours.

HIST 3331 Modern Germany since 1806
German history from the French Revolution to Re-Unification. Topics include nationalism and unification, revolutionary movements, industrialization and class society, Nazism and the Holocaust, post-war division, democratization and Europeanization, reunification, and the shifting nature of German identity. Three credit hours.

HIST 3336 Islam and the Modern Middle East
An examination of the role of Islam as the primary cohesive element in the social, political, and cultural development of the modern Middle East. Comparison and contrast of Western and Middle Eastern perspectives on relevant current issues. Same as RELS 3336. Three credit hours.

HIST 3341 East Asia Foundations: Culture & History to 1600
Development of the political, economic, social, and intellectual patterns within the East Asian cultural sphere from prehistory to the sixteenth century, with an emphasis on China and Japan. Three credit hours.

HIST 3342 Modern China
Early modern Chinese development, reaction to contacts with Western Civilization, continuity, modernity, and revolution from the sixteenth century to the present. Three credit hours.

HIST 3345 People’s Republic of China
The history of the origins of the Chinese Communist Party and of the development of China under Communist rule. Three credit hours.

HIST 3347 History of Japan
Development of the political, social, economic, and intellectual patterns of Japanese life from prehistory to the present. Three credit hours.

HIST 3351 Colonial America, 1607-1763
English settlements in the New World, the development of colonial society, American colonies, the British Empire. Three credit hours.

HIST 3352 American Revolution, 1763-1787
Colonial society in 1763, British imperial policy and the American response, the war for independence, effects of the Revolution on American ideas and institutions. Three credit hours.

HIST 3353 The New Republic: The US, 1787–1848
The formation of the Constitution, the emergence of American political institutions, economic and social development, and nationalism. Three credit hours.

HIST 3355 American Civil War and Reconstruction, 1848–1876
The origins of the American Civil War, its course, and subsequent efforts at reconciling North and South. Emphasis on the social, economic, and cultural background to the war and its impact on American society. Three credit hours.

HIST 3356 The Gilded Age: The US, 1876-1900
United States history from the end of Reconstruction through the presidential administration of William McKinley. The course emphasizes the changing character of America in this era, including the farmers’ revolt, industrialization, foreign affairs, and major social trends. Three credit hours.

HIST 3357 The Age of Reform: The US, 1900-1939
The political, economic, social, and diplomatic development of the United States between 1900 and 1939. Three credit hours.

HIST 3358 Recent America: The US, 1939-present
A history of the American people in recent times, including economic, social, and cultural developments as well as political, diplomatic, and military events. Three credit hours.

HIST 3371 History of Latin America: Colonial Period
Indian culture. Colonial European discovery, conquest, and colonial development; the Spanish colonial regime in the New World from 1492 to 1820; and wars of independence. Three credit hours.

HIST 3372 History of Latin America: Republican Period
Formation of the Latin American countries stressing political, economic, social, and cultural factors as well as the role of Latin America in world affairs. Three credit hours.

HIST 3375 Modern Mexican History
A study of political, social, and economic developments in Mexico since 1870. Industrialization, nationalism, foreign intervention, and multinational corporations as they relate to Mexican development and the 1910 Mexican Revolution. Three credit hours.

HIST 3380 The Indian in American History
A survey of red-white relations from first contacts through the creation of a reservation system in the 1800s and the removal of the Indians. Three credit hours.
HIST 4301 History of Technology
A survey of the role of technology from the Stone Age to the nuclear age. Three credit hours.

HIST 4302 Magic, Science, and the Occult from Antiquity to Newton
A survey of humans’ attempts to explain and control the cosmos from antiquity to the emergence of modern science around 1700, including the contributions of pseudo-scientific, occult, and magical world-views; internal developments in the history of science; and the relationship between scientific thought and the historical context. Dual-listed in the UALR Graduate Catalog as HIST 5303. Three credit hours.

HIST 4303 The Roman Revolution
This seminar will examine the fall of the Roman Republic and the rise of the Roman Empire. Students in this seminar are expected to acquire a reasonable mastery of major events and developments of this transitional period and to demonstrate at least adequate skill in written analysis of this material. Dual-listed in the UALR Graduate Catalog as HIST 5303. Three credit hours.

HIST 4304 Alexander the Great
This undergraduate/graduate seminar will examine the career of one of the most interesting and important figures in world history. Alexander expanded the domain of Greek civilization from the Mediterranean and Aegean Seas to the lands of Afghanistan and India. Dual-listed in the UALR Graduate Catalog as HIST 5304. Three credit hours.

HIST 4305 Environmental History
Study of humanity’s interrelationship with the natural environment throughout history, with emphasis on historical factors relating to current environmental problems. Three credit hours.

HIST 4306 History with Objects
Prerequisite: HIST 2311, 2312 or consent of instructor based on individual student need and ability. The role of objects in U.S. History including how different academic disciplines study artifacts; how to identify, authenticate, and evaluate artifacts (using decorative arts to learn visual literacy); and the impact of objects (especially their manufacturing and marketing) on American life. Dual-listed in the UALR Graduate Catalog as HIST 5306. Three credit hours.

HIST 4309 The Historian's Craft
This course offers an introduction both to historical methods (how historians go about doing history) and to historiography (the study of the many ways in which historians have written about the past), through a focus on a single historical topic. Three credit hours.

HIST 4313 Apocalypse Now and Then: A History of Apocalyptic Thought and Movements
This course offers a history of beliefs about the end of the world in the western Judeo-Christian tradition. Through lectures and readings, we will examine such topics as the birth of apocalyptic thought, the medieval development of various aspects of traditions about the End (such as the figure of Antichrist and millenarian traditions), millennial influences on the discovery and colonization of the New World, millennial movements of the last two centuries (such as the Millerites and the Mormons), and contemporary apocalyptic scenarios. A major theme of the course will be the flexibility of apocalyptic language, its ability to interpret various historical situations, and its power to move people to acceptance or action. Dual-listed in the UALR Graduate Catalog as HIST 5313. Three credit hours.

HIST 4314 A History of the Future: Millennial Visions in Film and Literature
Examines past moments in which people take stock of the present by gazing into the future. Through literature and film, studies predictions of the future in their historical contexts. Looks at positive and negative views of the future, secular and religious predictions for humans’ fate. Dual-listed in UALR Graduate Catalog as HIST 5314. Three credit hours.

HIST 4315 Religious History of the United States
Development of Protestantism including evangelicalism, new denominations, and fundamentalism; incorporation of Catholicism and Judaism into mainstream religion and social and political issues including church and state; minority religious beliefs and organizations; varying role of men and women in religious organizations. Dual-listed in the UALR Graduate Catalog as HIST 5315. Three credit hours.

HIST 4316 Ideology and Revolution in Eighteenth-Century Europe
The late eighteenth-century age of revolution and its background. The crisis of the Old Regime; the contributions of Jansenism, the Enlightenment, constitutionalism, and the politics of gender to the formation of a revolutionary ideology; the course of revolution during the last decade of the eighteenth century. Emphasis on France, but some attention to Britain, Germany, Italy, and America. Three credit hours.

HIST 4318 Modern Revolutions: From France to China
A comparative examination of five modern revolutions: the French Revolution (1789-1815), The Meiji “Restoration” in Japan (1853-1890), the Mexican Revolution (1910-1920), the Russian Revolution (1917-1932), and the Chinese Revolution (1919-1949). We will consider such issues as the extent of real turnover in the state apparatus, the prevalence of state-driven “revolutions from above” as opposed to classic “revolutions from below” in modern history, the balance of internal and external causation, and the nature of revolutionary violence. Dual-listed in the UALR Graduate Catalog as HIST 5318. Three credit hours.

HIST 4322 Honors Thesis
In this course students will write a thesis, under the guidance of a thesis committee, based on research in primary sources. Prior to enrolling in the class a student must discuss possible topics with the faculty member(s) with whom s/he plans to work, and draft a thesis proposal. On acceptance of the thesis proposal, students will be cleared to enroll in the thesis class. Three credit hours.

HIST 4326 History of the Atlantic World
This course examines the processes which brought together the history of Europe, Africa, North America and South America across the Atlantic Ocean. Major themes include the Atlantic Ocean as frontier and zone of interaction as well as political, economic and social changes resulting from inter-Atlantic connections. Dual-listed in the UALR Graduate Catalog as HIST 5326. Three credit hours.

HIST 4327 Africa in World History
In this class we will examine Africa’s development from ancient times to the present. In particular we will explore Africa’s relationships with other areas of the world and discuss the points where the African experience converges and diverges from the experience of other regions. We will also focus on three forces driving Africa’s development: geographical contexts, economic systems, and cultural relationships. Dual-listed in the UALR Graduate Catalog as HIST 5327. Three credit hours.
HIST 4328 South Africa in World History
In this class we will examine South Africa’s development from the seventeenth century to the present. In particular we will explore how the geography of southern Africa shaped the emergence of a group of distinct cultures, and how the expansion of racial divisions influenced South African society. We will also focus on the forces of tradition and modernity in the new South Africa. Dual-listed in the UALR Graduate Catalog as HIST 5328. Three credit hours.

HIST 4329 Empires and Cultures, 1850-1914
In this class we will explore the intersection of empires and cultures in world history between the mid-nineteenth century and the start of the first world war. We will read texts that describe the cultural encounter between imperial regimes and colonial cultures. These readings by both indigenous and European authors will let us ask questions and find answers to the issues surrounding the clash between empires and cultures in the late nineteenth century. Dual-listed in the UALR Graduate Catalog as HIST 5329. Three credit hours.

HIST 4333 European Social and Cultural History
Interdisciplinary survey of major European social and cultural developments from the Enlightenment to the present. Explores the interrelationship between a changing society and its beliefs; examines the political impact of modern ideologies, the sciences, and the arts. Three credit hours.

HIST 4335 History at the Movies
This course is designed to introduce students of the past to the potentials and pitfalls of film as a medium of historical exposition. Over the course of the twentieth century, the movies became a primary medium of artistic and commercial expression. The advent of commercial film-making in America also marked the first appearance of a particular “genre” of cinematic form-a “historical drama” was one of the first full-length feature films made in the United States, in 1915. Entitled Birth of a Nation, the movie purported to be a historical “facsimile” that chronicled the aftermath of the Civil War in the United States. Its commercial success guaranteed that movies with historical themes would continue to be made. Ever since, the makers of motion pictures have found the past to be a creative playground and a lucrative idiom. How do these movies relate to History? Dual-listed in the UALR Graduate Catalog as HIST 5335. Three credit hours.

HIST 4338 Holocaust
The Holocaust as both a German and international event, with special emphasis on the role of the United States. Major topics include: the tradition of anti-Semitism and the rise of biological racism in the Western world; the Nazi seizure of power; the politics of immigration, especially in the United States; the planning and execution of the Final Solution; the complicity of non-Germans; Jewish and non-Jewish resistance; the mixed role of the Allied powers, especially the United States; the settling of accounts at Nuremberg; and the impact of the Holocaust on survivors and anti-Semitism in the United States.

HIST 4345 Chinese Film and History
This course looks at the traumatic twentieth century through the lenses of Chinese filmmakers, particularly focusing on how a century of revolution affected urban and rural areas, the roles of women, and the daily lives of people in general. Dual-listed in the UALR Graduate Catalog as HIST 5345. Three credit hours.

HIST 4350 The United States and the Middle East
The development of American foreign policy in the Middle East from 1900 to present. Students will gain an understanding of the critical factors that shape and influence contemporary US-Middle Eastern relations. Dual-listed in the UALR Graduate Catalog as HIST 5350. Three credit hours.

HIST 4352 The American West: Trans-Mississippi
A study of the westward expansion of the United States; United States penetration into the Trans-Mississippi River West after the Lewis and Clark expedition; social, political, and economic development; culture of the indigenous Indians of the northern and southern plains. Three credit hours.

HIST 4353 The Old South
The development of southern institutions and ideas from the colonial period through the Civil War. Three credit hours.

HIST 4354 The New South
Continuity and change within the southern states from Reconstruction to the present. Three credit hours.

HIST 4355 History of Arkansas
Focuses on selected topics central to Arkansas history, covering its political, social, cultural, geographic, and economic development from settlement to present. Dual-listed in the UALR Graduate Catalog as HIST 5355. Three credit hours.

HIST/RACE 4356 History of Race and Ethnicity in America
A survey of the history of race and ethnicity in the United States from prehistory to present with a special focus on selected topics in the experience of African Americans, Asian Americans, European Americans, Latino Americans, and Native Americans. Dual listed in the UALR Graduate Catalog as HIST/RACE 5356. Three credit hours.

HIST 4358 Civil Rights since 1954
An examination of race relations in the United States from the landmark 1954 Brown v. Board of Education U.S. Supreme Court school desegregation decision to present, looking at among other topics the impact of the Civil Rights Movement, the Black Power Movement, Busing, and Affirmative Action. Dual listed in the UALR Graduate Catalog as HIST 5358. Three credit hours.

HIST 4359 American Urban History
Beginnings and growth of urbanization in America from colonial times to the present. Emphasis on the economic base of urban expansion; development of urban policies, services, and municipal administration; the image of the city in popular thought; the impact of industrialization, transportation, population, and the frontier on urbanization. Three credit hours.

HIST 4363 Law in American History
The development of legal institutions in America from their English origins to the present. The rule of law, legal thought and the legal profession, the independent judiciary, civil rights, and the law’s role in economic development. Three credit hours.

HIST 4364 History of American Enterprise
The development of business enterprise in America from its roots in English colonialism through the advent of industrialism; the growth of commerce, the geopolitical foundations of a national marketplace, and the dawn of the corporate age; the relationship between property and the state, social values and the profit motive, innovation and economic advance. Three credit hours.

HIST 4365 Modern U.S. Culture
An examination of the historical development of mass culture in modern America. Concentration on the historical dimensions of culture and the ways in which Americans have redefined their values in response to technological and social change. It will explore the impact of various mechanisms through which a mass culture emerged, including movies, magazines, radio, television. Considers the relationship between culture and national character as currently debated by leading historians. Three credit hours.
HIST 4367 American Labor History
A study of American labor history from colonial times to the present; indentured servitude, slavery, sea-going and free labor, the impact of immigration and the introduction of the factory system, patterns of organization, mass production industries, automation, and the emergence of subsequent problems of the modern labor movement. Three credit hours.

HIST 4368 African American History to 1865
An overview of the African American experience from Slavery to Civil War and Emancipation, examining political, cultural, social, legal, constitutional, and economic developments. Dual-listed in the UALR Graduate Catalog as HIST 5368. Three credit hours.

HIST 4369 African American History Since 1865
An overview of the African American experience from Civil War and Emancipation through Reconstruction, the Age of Segregation, the Civil Rights Movement, and the Black Power Movement to present, examining political, cultural, social, legal, constitutional, and economic developments. Dual-listed in the UALR Graduate Catalog as HIST 5369. Three credit hours.

HIST 4371 Women in World History
An examination of the conditions of women in history with emphasis on problems in European history; attitudes toward women as reflected in religious, legal, and philosophical literature; and the role expectations of women in various societies. Three credit hours.

HIST 4372 Perspectives on Women in American History
Consideration of conditions and problems of women in American history from colonial to modern times with reference to European background and parallels when appropriate. Three credit hours.

HIST 4373 History of Family and Childhood in Modern Europe
The course introduces students to the history of childhood and family life in nineteenth and twentieth century Europe. Three credit hours.

HIST 4378 The History of U.S.-Latin American Relations
Survey of U.S.-Latin American relations from the pre-Columbian period to the present with emphasis on the nineteenth and early twentieth centuries. Focus on the diplomatic and economic relationships, including dollar diplomacy, intervention, dictatorship, and revolution. Dual-listed in the UALR Graduate Catalog as HIST 5378. Three credit hours.

HIST 4385 U.S. Diplomatic History
The origins, character, and consequences of United States foreign policy and its transformations through the nineteenth century, World War I, World War II, the Cold War, and the modern world. Three credit hours.

HIST 4390 Special Topics in History
Specialized study of selected topics in history. Course content changes each semester; refer to the semester class directory. Dual-listed in the UALR Graduate Catalog as HIST 5390. Three credit hours.

HIST 4391 Seminar in United States History
Prerequisites: HIST 2311, 2312, six hours of upper-level United States history. Advanced study of a topic in United States history chosen by instructor; includes a major research and writing project incorporating the department’s goals of identifying a problem; establishing a thesis; gathering, evaluating, and analyzing evidence; and writing in an appropriate scholarly format. Dual-listed in the UALR Graduate Catalog as HIST 5391. Three credit hours.

HIST 4393 Seminar in World History
Prerequisites: HIST 1311, 1312, three hours of upper-level non-US history. Advanced study of a topic in non-US history chosen by instructor; includes a major research and writing project incorporating the department’s goals of identifying a problem; establishing a thesis; gathering, evaluating, and analyzing evidence; and writing in an appropriate scholarly format. Dual-listed in the UALR Graduate Catalog as HIST 5393. Three credit hours.

HIST 4395 History Internship
Prerequisites: junior or senior standing, 15 credit hours of history. This course involves field experience with a history-related business or public agency. The student will work under the supervision of an individual at the internship agency and a member of the history faculty. The student must secure permission from both supervisors before registration. Three credit hours.

HIST 4396 Seminar in Arkansas History
Prerequisite: consent of instructor. Discussion, directed readings, research, and writing on selected issues. Topics will vary. May be repeated as topics vary for up to six credit hours. A major research and writing project incorporating the department’s goals of identifying a problem; establishing a thesis; gathering, evaluating, and analyzing evidence; and writing in an appropriate scholarly format, is required. Dual-listed in the UALR Graduate Catalog as HIST 5396. Three credit hours.

HIST 4397 Teaching Applications
The course links social studies content with practical applications for classroom instruction. The content information comes from history, geography, political science, sociology/anthropology, and psychology. This content is modeled for prospective secondary education teachers to illustrate how content can be applied in the classroom. The critical components of each of the disciplines will be integrated into the content presentations and the demonstrated applications. This course will be team taught. Same as GEOG 4397 and POLS 4397. Three credit hours.

HIST 4199, 4299, 4399 Independent Study
Prerequisites: senior standing, 15 credit hours of history. Open to history majors only. For students of superior ability who seek special research in the field. One, two, or three credit hours. 

Courses in Race and Ethnicity (RACE)

RACE 2301 Introduction to Race and Ethnicity
This course provides an overview of the key concepts and issues in the interdisciplinary study of race and ethnicity. The course serves as an introduction to complex issues such as the social construction of race and ethnicity, white privilege, the role of media in that construction, the effect of immigration on conversations about race, individual and institutional discrimination, multiple differences and intersecting oppressions. Students will explore their own racial identities, biases, and prejudices. Course materials facilitate engagement in critical analysis of textual and statistical information from a variety of disciplinary sources. This course is required for the minor in Race and Ethnicity. Three credit hours.

HIST/RACE 4356 History of Race and Ethnicity in America
A survey of the history of race and ethnicity in the United States from prehistory to present with a special focus on selected topics in the experience of African Americans, Asian Americans, European Americans, Latino Americans, and Native Americans. Dual listed in the UALR Graduate Catalog as HIST/RACE 5356. Three credit hours.

RACE 4100/4200/4300 Independent Study Race and Ethnicity
Prerequisite: Consent of instructor. This course is available to students minoring in Race and Ethnicity only. For the student of superior ability who wishes to pursue research in the field. One, Two, or Three credit hours.
The Department of International and Second Language Studies (DISLS) comprises academic programs in foreign languages, academic and non-academic classes in English as a Second Language, and foreign language and ESL education. Majors offered in the DISLS include World Languages: French, World Languages: German studies, World Languages: and Spanish. Minors include French, German, and Spanish.

Courses in foreign languages are offered to give the student proficiency in basic language skills, such as speaking, writing, reading, and understanding; to guide advanced students to fluency of the written and spoken idioms; to acquaint students with major literary works in foreign languages and increase awareness and appreciation of other cultures; to provide courses necessary and useful for those preparing to teach a foreign language or communicate in international affairs; to promote intercultural communication; and to offer background preparation necessary for graduate work in a foreign language. In order to insure that this occurs, the skills of listening, speaking, reading, writing, and cultural understanding are assessed throughout the programs and upon completion of the major.

### General Information

#### Second Language Requirement for BA, B.S.E, and B.S.W Students

Students seeking a B.A. degree in any of the following majors are required to complete a 2000-level second language course or demonstrate equivalent proficiency as measured by a competency test.

Students seeking a B.S.E. in Early Childhood Education are required to complete 3 hours of a second language and 3 hours of English as a Second Language. Students seeking a B.S.E. in Middle Childhood Education are required to complete 6 hours of a second language or English as a Second Language in any combination or level. Students seeking a B.S.W. degree are required to complete the elementary I and II levels of a second language sequence of courses.

See “Second Language Requirement” for further details.

### Second Language Placement

Students who wish to enroll in language courses at UALR may need to take a placement test. Computerized, multiple-choice tests for French, German, and Spanish (the F-CAPE, the G-CAPE, and the S-CAPE) are administered at the Office of Testing Services and Student Life Research. The following students do not need to take the proficiency test before enrolling:

- Students who have never studied French, German, or Spanish and are enrolling in first semester courses in these languages.
- Students who have already completed UALR second language courses.
- Students who have completed university-level courses for transfer credit in French, German, or Spanish.
- All other students should take the test before enrolling in UALR language courses.

### Secondary Teacher Licensure Program

Core Requirements (44 hours)

- Major in French, Spanish (30 hours of German) 30 hours (+6)
- Minor in Secondary Education (18 hours)
- A “teachable” minor (21 hours)

Second Language Education Block (12 hours)

Total 125 hours

An official ACTFL-certified Oral Proficiency Interview is required for all students seeking Teacher Licensure in French, German, or Spanish. Certification at the Advanced-low oral proficiency level is encouraged. See “Secondary Teacher Licensure” for further details.

Any part of the minor in secondary education and the second language education block may be met by demonstration of competency.

### Credit Validation – Language

Students who have acquired language skills before enrolling at UALR may receive credit for their proficiency by taking the sequel language skill course and earning a grade of B or greater. Students may request a placement test to find the level at which they should enroll. Up to 12 hours of credit may be obtained in this manner. For more information, see a faculty member in the department.

### Accelerated Option for Majors in World Languages: French, German Studies, or Spanish

The accelerated option allows students who have acquired proficiency in French, German or Spanish to take advantage of their knowledge to progress toward degree completion more rapidly than traditional program requirements would allow. A student desiring accelerated status toward completion of a major in World Languages: French, German Studies, or Spanish may demonstrate proficiency as prescribed below and obtain 24 hours of credit (CR), 18 of which will count toward the 30-hour major requirement.

To demonstrate eligibility for accelerated status, a student must prove oral and writing proficiency by (1) scoring at least “Advanced-Mid” on an official Oral Proficiency Interview (OPI) from ACTFL (American Council on the Teaching of Foreign Languages) and (2) scoring at least “Advanced-Mid” on an official Writing Proficiency Test (WPT) from ACTFL. A student who achieves “Advanced-Mid” or higher ratings on both assessments will be granted 24 hours of credit (CR) for the following courses: 1311, 1312, 2311, 2312 (German only), 3310 (French and Spanish only), 3311, 3312, 2315, 3115, 3116, and 3117.
In addition to the above credits, completion of the major will require 12 credit hours of upper-level work in the major language, to include one culture course (3334, 3335, or 3336 [French only] and six credit hours at the 4000 level. For more information, see a faculty member in the department.

ESL Endorsement for Teachers
The DISLS offers the four-course endorsement in English as a Second Language (ESL) as per the requirements of the State of Arkansas. The endorsement is added to current teacher licensure, K-12. Students seeking the endorsement must take LANG 4322 Teaching Second Languages, LANG 4323 Second Language Acquisition, LANG 4324 Teaching People of Other Cultures, and LANG 4325 Second Language Assessment.

The Intensive English Language Program (IELP), in the College of Arts, Humanities and Social Sciences, offers non-English speakers a full-time program in English language skills: speaking, listening, reading, and writing. After completing IELP, students with the necessary academic qualifications may be admitted to UALR without taking the Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE), or the Michigan test.

Degree Requirements
World Languages: French
A Major in World Languages: French for students pursuing the bachelor of arts degree consists of 30 hours above the 1000 level as specified below, of which 9 hours must be at the 4000 level. A grade of C or greater is required in all courses specified for the major. French majors are strongly encouraged to enroll in LANG 4322 Teaching Second Languages. This course does not count as part of the 30 hours in French; it offers enrichment to the degree program.

MINOR IN FRENCH

A minor in French consists of 21 hours above the 1000 level. Fifteen hours must be in upper-level courses, with at least three hours at the 4000 level as specified below. A grade of C or greater is required in all courses specified for the minor. French minors are strongly encouraged to enroll in LANG 4322 Teaching Second Languages. This course does not count as part of the 21 hours in French.

Minor Coursework
FREN 2311 Intermediate French I
Communications (9 hours)
6 hours from the following
FREN 3310 Integrated Skills I
FREN 3311 Integrated Skills II
FREN 3312 Integrated Skills III
3 hours from the following
FREN 2315 Intermediate Conversational French
FREN 3115, 3116, 3117 Advanced Conversation
Cultures (3 hours)
FREN 3334 French Culture and Civilization I
FREN 3335 French Culture and Civilization II
FREN 3336 Francophone Cultures
Comparisons and Communities (3 hours)
FREN 3316 French Pronunciation
FREN 4316 Advanced Listening and Pronunciation
FREN 4141, 4142, 4143 French Practicum
FREN 4350 Senior Project
LANG 3390 Study Abroad
Connections (3 hours)
FREN 3333 Selected Readings in French Literature
FREN 4331 Writings: Historical Perspective
FREN 4341 Writings: Modern Perspective
FREN 4351 French Cinema
FREN 4361, 4362 Seminar in French Literature

Honors Program in French
The department offers an honors program available to exceptional students leading to the bachelor of arts in World Languages: French with honors. To be admitted to the program, a student must apply for acceptance to the program, be a declared major in World Languages: French, have at least 60 hours of undergraduate college credit, including at least 15 hours of French, and have a cumulative grade point average of at least 3.25 on all University work taken at UALR and elsewhere.

To qualify for the degree with honors, a student must maintain a cumulative grade point average of at least 3.25 and a 3.25 in all French courses, complete all requirements for the World Languages: French major, and include a three hour specialized French seminar and a three hour Senior project in the 30 hours required for the French major. Study abroad is strongly encouraged. More information can be obtained from the department advisor.

Bachelor of Arts in World Languages: French

Core Requirements (44 hours)
Second Language Proficiency
FREN 2311 Intermediate French I
Communications (12-15 hours)
FREN 3310 Integrated Skills I
FREN 3311 Integrated Skills II
FREN 3312 Integrated Skills III
FREN 2315 Intermediate Conversational French
or FREN 3115, 3116, 3117 Advanced Conversation
Cultures (3-9 hours)
FREN 3334 French Culture and Civilization I
FREN 3335 French Culture and Civilization II
FREN 3336 Francophone Cultures
Comparisons and Communities (3-9 hours)
FREN 3316 French Pronunciation
FREN 4316 Advanced Listening and Pronunciation
FREN 4141, 4142, 4143 French Practicum
FREN 4350 Senior Project
LANG 3390 Study Abroad
Connections (3-9 hours)
FREN 3333 Selected Readings in French Literature
FREN 4331 Writings: Historical Perspective
FREN 4341 Writings: Modern Perspective
FREN 4351 French Cinema
FREN 4361, 4362 Seminar in French Literature
BACHELOR OF ARTS IN WORLD LANGUAGES: GERMAN STUDIES

Core Requirements (44 hours)
Second Language Proficiency
German Language Courses Above the 1000 Level (30 hours)
   - GERM 3334, 4151, 4152, 4153, a 4000-level German literature seminar
German Language Instruction (15 hours)
Electives (6 hours—must be in a related discipline)
   A major in World Languages: German Studies for students pursuing the bachelor of arts degree consists of 30 hours above the 1000 level, including GERM 3334, 4151, 4152, 4153, a 4000-level German literature seminar, 15 hours of German language instruction, and 6 approved elective hours in a related discipline. Options for elective courses must be approved by the German Studies Committee and have a German Studies focus such as art history, history, philosophy, politics, etc. A grade of C or greater is required in all courses specified for this major. World Languages: German Studies majors are encouraged to participate in a study abroad program to deepen their understanding of German-speaking cultures. There are no special program admission requirements.

Minor in German
   A minor in German consists of 21 hours above the 1000 level. Fifteen hours must be in upper-level courses, with at least three hours at the 4000 level. A minor must complete GERM 3311 and 3312 or demonstrate equivalent proficiency. A grade of C or greater is required in all courses specified for the minor. German minors are strongly encouraged to enroll in LANG 4322 Teaching Second Languages. This course does not count as part of the 21 hours in German.

BACHELOR OF ARTS IN WORLD LANGUAGES: SPANISH

Core Requirements (44 hours)
Second Language Proficiency
Spanish Language Courses Above the 1000 Level (3 hours)
Upper-Level Courses (27 hours—at least 6 hours at the 4000-level)
   A major in World Languages: Spanish for students pursuing the bachelor of arts degree consists of 30 hours above the 1000 level. Twenty-seven hours must be in upper-level courses, with at least six hours at the 4000-level. A major must complete SPAN 3311 and 3312 or demonstrate equivalent proficiency. A grade of C or greater is required in all courses specified for the major. World Languages: Spanish majors are strongly encouraged to enroll in LANG 4322 Teaching Second Languages. This course does not count as part of the 30 hours in Spanish.

Minor in Spanish
   A minor in Spanish consists of 21 hours above the 1000 level. Fifteen hours must be in upper-level courses, with at least three hours at the 4000 level. A minor must complete SPAN 3311 and 3312 or demonstrate equivalent proficiency. A grade of C or greater is required in all courses specified for the minor. Spanish minors are strongly encouraged to enroll in LANG 4322 Teaching Second Languages. This course does not count as part of the 21 hours in Spanish.

Instruction in Other Languages
   Courses in other modern languages (Japanese, Mandarin, Russian, etc.) and classical languages (Greek, Hebrew, Latin, etc.) are offered periodically in response to student interest.

Courses in Chinese (CHIN)
   CHIN 1311 Elementary Mandarin Chinese I
      A course for beginners with no knowledge of Mandarin Chinese. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic grammar and a limited reading ability. Chinese culture is also introduced. Three credit hours.
   CHIN 1312 Elementary Mandarin Chinese II
      Prerequisite: CHIN 1311 or equivalent. Continuation of CHIN 1311. Three credit hours.
   CHIN 2311 Intermediate Mandarin Chinese
      Prerequisite: CHIN 1312 or equivalent. A continuation of CHIN 1312, the intermediate course leads to greater facility in the spoken language and to more advanced reading skills. Three credit hours.

Courses in Classical Languages (CLNG)
   CLNG 1301 Elementary Classical Language I
      Offered in a designated classical language in response to student interest. Introduction to the grammar of a designated classical language. Elementary reading and translation in selected texts. Three credit hours.
   CLNG 1302 Elementary Classical Language II
      Prerequisite: CLNG 1301 in specified classical language or equivalent. Continuation of Classical Language 1301. Three credit hours.
   CLNG 1311 Elementary Biblical Hebrew
      Introduction to the grammar of biblical Hebrew. Elementary reading in selected biblical texts. Three credit hours.
   CLNG 1312 Biblical Hebrew Reading
      Prerequisite: CLNG 1311 or consent of instructor. Reading of selected biblical prose texts, leading toward development of rapid reading ability. Three credit hours.
   CLNG 2301 Intermediate Classical Language I
      Prerequisite: CLNG 1302 or equivalent. Readings from the works of classical authors providing an introduction to the literature of the ancient world. Three credit hours.
   CLNG 2302 Intermediate Classical Language II
      Prerequisite: CLNG 2301 or equivalent. Readings from the works of classical authors to prepare students for studies of prose and poetry written during the flowering of ancient civilizations. Three credit hours.
   CLNG 3311 Advanced Biblical Hebrew
      Prerequisite: CLNG 1312. Selected readings of poetic texts in the Hebrew Bible. Investigation of poetic syntax and meter. Three credit hours.

Courses in French (FREN)
   FREN 1311 Elementary French I
      A course for beginners with no knowledge of French. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic grammar and a limited reading ability. Three credit hours.
   FREN 1312 Elementary French II
      Prerequisite: FREN 1311 or equivalent. Continuation of FREN 1311. Three credit hours.
FREN 1315 Conversational French
Prerequisite: FREN 1312 or consent of instructor. A performance course with emphasis on elementary conversation and discussion. For students with a basic knowledge of French grammar. Three credit hours.

FREN 2311 Intermediate French
Prerequisite: FREN 1312 or equivalent. The intermediate course leads to greater facility in the spoken language and to more advanced reading skills. Three credit hours.

FREN 2315 Intermediate Conversational French
Prerequisite: FREN 2311. A performance course with emphasis on intermediate-level conversation and discussion. Three credit hours.

FREN 3115, 3116, 3117 Advanced Conversation
Special topics for discussion at an advanced level. Leads to expanded vocabulary mastery and greater fluency in the spoken idiom. May be taken one, two, or three hours per semester to a maximum of six hours.

FREN 3310 Integrated Skills I
Prerequisite: FREN 2311 or equivalent proficiency. An integrated approach to skill acquisition leading to intermediate-high proficiency. Within the rubric of communication, content focuses on the presentational mode. Three credit hours.

FREN 3311 Integrated Skills II
Prerequisite: FREN 2311 or equivalent proficiency. An integrated approach to skill acquisition leading to intermediate-high proficiency. Within the rubric of communication, content focuses on the interpersonal mode. Three credit hours.

FREN 3312 Integrated Skills III
Prerequisite: FREN 2311 or equivalent proficiency. An integrated approach to skill acquisition leading to intermediate-high proficiency. Within the rubric of communication, content focuses on the interpretive mode. Three credit hours.

FREN 3316 French Pronunciation
Prerequisite: FREN 2311 or consent of instructor. The sounds and phonetic symbols of the French language with reference to phrasing, stress, rhythm, and intonation. Three credit hours.

FREN 3321 French Short Stories
Prerequisite: FREN 2311 or consent of instructor. Reading and criticism of short stories by outstanding authors. Three credit hours.

FREN 3332 Introduction to French Literature
Prerequisite: FREN 2311. History of the literature from the end of the seventeenth century to the present. Three credit hours.

FREN 3333 Selected Readings in French Literature
Prerequisite: 3000-level French course or consent of instructor. Reading and discussion of selected works from French literature. Three credit hours.

FREN 3334 French Culture and Civilization I
Prerequisite: FREN 2311 or equivalent (may be corequisite with consent of the instructor). Historical, sociological, and cultural background of the French people. Three credit hours.

FREN 3335 French Culture and Civilization II
Prerequisite: FREN 2311 or equivalent. A continuation of FREN 3334. Three credit hours.

FREN 3336 Francophone Cultures
Prerequisite: FREN 2311 or equivalent proficiency. History and culture of francophone communities outside of metropolitan France, including French overseas departments (Martinique, Guadeloupe), the Maghreb, West Africa, and North America (Québec, Louisiana). Three credit hours.

FREN 4141, 4142, 4143 French Practicum
Prerequisite: FREN 3312 and two 3000-level French courses. Special problems in French syntax and stylistics. Offers students an opportunity to enrich and reinforce knowledge of syntax and stylistics for greater mastery in written communication. May be taken one hour per semester to a maximum of three hours.

FREN 4316 Advanced Listening and Pronunciation
Prerequisite: two 3000-level French courses. Advanced listening and pronunciation skills with reference to varieties of French spoken in the Francophone world. Three credit hours.

FREN 4331 Writings: Historical Perspective
Prerequisite: two 3000-level French courses. Reading and criticism of works of outstanding authors to the end of the 19th century. Three credit hours.

FREN 4341 Writings: Modern Perspective
Prerequisite: two 3000-level French courses. Reading and criticism of works of outstanding authors from the early 20th century to the present time. Three credit hours.

FREN 4350 Senior Project
Prerequisite: two 3000-level French courses. An independent project requiring research, oral presentation and written documentation under the guidance of French faculty. Topic must be approved prior to registration. Three credit hours.

FREN 4351 Cinema
Prerequisite: two 3000-level French courses. Viewing and discussion of French films including how French films both shape and reflect aspects of French cultural identity. Three credit hours.

FREN 4361, 4362 Seminar in French Literature
Prerequisite: two French literature courses or consent of instructor and two 3000-level French courses. Reading, discussion, and critical analysis of selected works from French literature. Three or two credit hours.

FREN 4101, 4201, 4301 Independent Study
Prerequisite: two 3000-level French courses and consent of the instructor. Reading from a selected bibliography of French authors. Credit is determined at the beginning of the course according to the problem and will not be altered. One, two, or three credit hours.

Courses in German (GERM)

GERM 1111 Elementary German Laboratory I
Corequisite: GERM 1311. Supervised laboratory practice in listening, speaking, and aural comprehension of German. One credit hour.

GERM 1112 Elementary German Laboratory II
Prerequisite: GERM 1311 or equivalent. Corequisite: GERM 1312. Continuation of GERM 1111. One credit hour.

GERM 1115, 1215, 1315 Conversational German
Prerequisite: GERM 1312 or consent of instructor. A performance course with emphasis on elementary conversation and discussion. For students with a basic knowledge of German grammar. One, two, or three credit hours.

GERM 1301 Reading German
Essential grammar for reading German, with minor emphasis on pronunciation. Will not substitute for any other course in German. Three credit hours.

GERM 1311 Elementary German I
A course for beginners with no knowledge of German. Instruction in correct pronunciation, aural comprehension, and simple speaking ability. Three credit hours.
GERM 1312 Elementary German II
Prerequisite: GERM 1311 or equivalent. Practice in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic grammar and a limited reading ability. Three credit hours.

GERM 2111 Intermediate German Laboratory I
Corequisite: GERM 2311. Supervised laboratory practice in listening, speaking and aural comprehension of German at an intermediate level. One credit hour.

GERM 2112 Intermediate German Laboratory II
Corequisite: GERM 2312. Continuation of GERM 2111. One credit hour.

GERM 2311 Intermediate German I
Prerequisite: GERM 1312 or equivalent. The intermediate course leads to greater facility in the spoken language and to more advanced reading skills. Three credit hours.

GERM 2312 Intermediate German II
Prerequisite: GERM 2311 or equivalent. Continuation of GERM 2311. Three credit hours.

GERM 2315 Intermediate German Conversation
Prerequisites: GERM 2311, 2312 or instructor’s consent. A course to practice oral skills on a wide range of topics. Students will learn how to narrate, describe, compare, and comment. Three credit hours.

GERM 2337 German Literature in Translation
The study and reading of representative works (in English) of German prose, poetry, and drama. Will not apply toward a major or minor in German. Three credit hours.

GERM 3115, 3116, 3117 Advanced German Conversation
Prerequisite: GERM 2315 or higher or consent of instructor. A course leading to greater fluency in oral skills. Students work toward oral proficiency through discussions on specialized topics. One credit hour.

GERM 3311 Advanced Composition and Conversation
Prerequisite: GERM 2312 or equivalent. Review of basic grammar and practice of oral and written skills. Three credit hours.

GERM 3312 Advanced Composition and Syntax
Prerequisite: GERM 2312 or equivalent. GERM 3311 is recommended. Grammar and syntax toward mastery of reading, writing, and speaking skills. Three credit hours.

GERM 3316 German Phonetics
Prerequisite: 2000-level German course. The sounds and phonetic symbols of the German language with reference to its history. Three credit hours.

GERM 3321 German Short Stories
Prerequisite: GERM 3312 or consent of instructor. Reading and criticism of short stories by outstanding authors. Three credit hours.

GERM 3332 Introduction to German Literature
Prerequisite: GERM 3312. Selected readings in German literature and brief history of the literature from the age of Goethe to the present. Three credit hours.

GERM 3333 Selected Readings in German Literature
Prerequisite: 3000-level German course or consent of instructor. Reading and discussion of selected works from German literature. Three credit hours.

GERM 3334 German Culture and Civilization
Prerequisite: GERM 2312 or the equivalent. Background studies for German literature. The social, intellectual, and cultural history of German-speaking countries as it applies to the study and teaching of German language and literature. Three credit hours.

GERM 4101, 4201, 4301 Independent Study
Prerequisite: consent of instructor. Reading from a selected bibliography of works in the field of Germanic languages and literature. Credit is determined at the beginning of the course according to the problem and will not be altered. One, two, or three credit hours.

GERM 4151, 4152, 4153 Senior Research Project
Prerequisite: senior standing. An independent research project completed over two semesters under guidance of a faculty supervisor whose field is related to the proposed area of investigation. The project has three components, consisting of a proposal (4151), a formal paper (4152), and an oral presentation (4153), each providing one hour of academic credit. A student may enroll in 4152 and 4153 only after completing 4151. Required for German studies majors. Three credit hours.

GERM 4161, 4261, 4361 Seminar: Special Topics
Prerequisite: six hours of upper-level German or consent of instructor. Reading, discussion, and critical analysis of selected materials from German speaking regions. Course content will change on demand. May be repeated for a maximum of six hours if topic changes. One, two, or three credit hours.

Courses in General Foreign Languages (LANG)

LANG 1301 English as a Foreign Language
A novice-level course for non-native speakers of English. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic reading, writing, and grammar.

LANG 1302 English as a Foreign Language
A novice-level course for non-native speakers of English. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic reading, writing, and grammar.

LANG 1303 English as a Foreign Language
A novice-level course for non-native speakers of English. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic reading, writing, and grammar.

LANG 1304 English as a Foreign Language
A novice-level course for non-native speakers of English. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic reading, writing, and grammar.

LANG 1111 Elementary Language Laboratory I
Corequisite: LANG 1311. Offered in a designated foreign language. Supervised laboratory practice in listening, speaking, and aural comprehension. One credit hour.

LANG 1112 Elementary Language Laboratory II
Corequisite: LANG 1312. Continuation of LANG 1111. One credit hour.

LANG 1210 Language for Travel and Business
Conversational skills in a designated foreign language for individuals interested in language primarily for travel and business. Will not substitute for any 1311, 1312, or 1315 language course. Two credit hours.

LANG 1212 Language for Travel and Business II
Continuation of LANG 1210. Will not substitute for any 1311, 1312, or 1315 language course. Two credit hours.
LANG 1311 Elementary Language I
Offered in a designated foreign language in response to student interest. A course for beginners with no knowledge of the specified language. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic grammar and a limited reading ability. Three credit hours.

LANG 1312 Elementary Language II
Prerequisite: LANG 1311 in specified language or equivalent. Continuation of LANG 1311. Three credit hours.

LANG 1321, 1322 English as a Foreign Language
An elementary course for nonnative speakers of English. Instruction in correct pronunciation, aural comprehension, and simple speaking ability leading to active mastery of basic grammar and a limited reading ability. Three credit hours.

LANG 1323, 1324 English as a Foreign Language
Prerequisites: LANG 1321, 1322, or equivalent proficiency. Continuation of LANG 1321, 1322. Three credit hours.

LANG 1325, 1326 English as a Foreign Language
Prerequisites: LANG 1325, 1326, or equivalent proficiency. Continuation of LANG 1325, 1326. Three credit hours.

LANG 1311 Elementary Language I
Prerequisite: LANG 1311 in specified language or equivalent. A continuation of LANG 1312, the intermediate course leads to greater facility in the spoken language and to more advanced reading skills. Three credit hours.

LANG 1312 Intermediate Language I
Prerequisite: LANG 1312 in specified language or equivalent. A continuation of LANG 1312, the intermediate course leads to greater facility in the spoken language and to more advanced reading skills. Three credit hours.

LANG 1321, 1322 Intermediate Language II
Prerequisite: LANG 2311 in specified language or equivalent. Continuation of LANG 2311. Three credit hours.

LANG 2302 Foreign Language for Music Students
Study and practice of pronunciation of Italian, French, and German for music students; selections from opera, folk music, and standard vocal repertoire. Cannot be used to fulfill requirements in the department. Three credit hours.

LANG 2311 Intermediate Language I
Prerequisite: LANG 1312 in specified language or equivalent. A continuation of LANG 1312, the intermediate course leads to greater facility in the spoken language and to more advanced reading skills. Three credit hours.

LANG 2312 Intermediate Language II
Prerequisite: LANG 2311 in specified language or equivalent. Continuation of LANG 2311. Three credit hours.

LANG 2350 Foreign Language Study Trip
Prerequisite: appropriate LANG 1312 or consent of department chairperson. Offered with study abroad programs only. In addition to practical experience in language usage, students will undertake various projects requiring language use. Three credit hours. This course does not satisfy the UALR second language proficiency requirement.

LANG 4322 Teaching Second Languages
An overview of methods and materials used to teach skill development in modern second languages, techniques considered most effective, and appropriate assessment strategies. Required for foreign language teacher certification and the ESL endorsement in the state of Arkansas. Dual-listed in the UALR Graduate Catalog as LANG 5322. Three credit hours.

LANG 4323 Second Language Acquisition
Prerequisite: junior standing. A course for those preparing to teach second language is acquired by children and adults. A course for those preparing to teach students with limited English proficiency. Required for ESL endorsement in the state of Arkansas. Dual-listed in the UALR Graduate Catalog as LANG 5323. Three credit hours.

LANG 4324 Teaching People of Other Cultures
Prerequisite: junior standing. Cultural issues for teaching students with limited English proficiency. A required course for ESL endorsement in the state of Arkansas. Dual-listed in the UALR Graduate Catalog as LANG 5324. Three credit hours.

LANG 4325 Second Language Assessment
Prerequisite: junior standing. Examines goals, principles, instruments, and techniques of assessment and testing of second language learners. A course for adults. A required course for ESL endorsement in the state of Arkansas. Dual-listed in the UALR Graduate Catalog as LANG 5325. Three credit hours.

LANG 4350 Advanced Foreign Language Study Trip
Prerequisite: appropriate language at the junior level or consent of department chairperson (given for equivalent knowledge). Offered with study abroad programs only. In addition to gaining practical experience in language usage, students will choose and undertake a research project of their choice, requiring fluency. Three credit hours. This course does not satisfy the UALR second language proficiency requirement.

Courses in Spanish (SPAN)

SPAN 1111 Elementary Spanish Laboratory I
Corequisite: SPAN 1311. Supervised laboratory practice in listening, speaking, and aural comprehension. One credit hour.

SPAN 1112 Elementary Spanish Laboratory II
Corequisite: SPAN 1312. Continuation of SPAN 1111. One credit hour.

SPAN 1301 Reading Spanish
Essential grammar for reading Spanish with minor emphasis on pronunciation. Will not substitute for any other course in Spanish or apply toward a major or minor in Spanish. Three credit hours.

SPAN 1311 Elementary Spanish I
A course for students with no knowledge of Spanish. Instruction in correct pronunciation, aural comprehension, and simple speaking ability. Three credit hours.

SPAN 1312 Elementary Spanish II
Prerequisite: SPAN 1311 or equivalent. Practice in correct pronunciation, aural comprehension, and simple speaking ability leading to mastery of basic grammar and limited reading ability. Three credit hours.

SPAN 1315 Conversational Spanish
Prerequisite: SPAN 1312 or consent of instructor. A performance course with emphasis on elementary conversation and discussion. For students with a basic knowledge of Spanish grammar. Three credit hours.

SPAN 2311 Intermediate Spanish
Prerequisite: SPAN 1312 or equivalent. The intermediate course leads to a greater facility in the spoken language and to more advanced reading skills. Three credit hours.

SPAN 2315 Intermediate Spanish Conversation
Prerequisite: SPAN 2311 or consent of instructor. A course to practice oral skills on a wide range of topics. Students narrate, describe, compare, and comment. Three credit hours.

SPAN 3115, 3116, 3117 Advanced Spanish Conversation
Prerequisite: SPAN 2315 or higher or consent of instructor. A course to practice oral skills on a wide range of topics. Leads to expanded vocabulary mastery and greater fluency in the spoken idiom. May be taken to a maximum of three hours.
SPAN 3301 Contextualized Spanish Grammar
An intensive study of Spanish grammar and application of specific grammatical structures to authentic communicative contexts. Three credit hours.

SPAN 3310 Communications: Presentational
Prerequisite: SPAN 2311. An integrated approach to skill acquisition leading to intermediate-high proficiency. Within the rubric of communication, content focuses on the presentational mode. Three credit hours.

SPAN 3311 Communications: Interpersonal
Prerequisite: SPAN 2311. An integrated approach to skill acquisition leading to intermediate-high proficiency. Within the rubric of communication, content focuses on the interpersonal mode. Three credit hours.

SPAN 3312 Communications: Interpretive
Prerequisite: SPAN 2311. An integrated approach to skill acquisition leading to intermediate-high proficiency. Within the rubric of communication, content focuses on the interpretive mode. Three credit hours.

SPAN 3316 Spanish Phonetics
Prerequisite: SPAN 2311 or consent of instructor. The sounds and phonetic symbols of the Spanish language with reference to phrasing, stress, rhythm, and intonation. Three credit hours.

SPAN 3321 Spanish Short Stories
Prerequisite: SPAN 2311 or consent of instructor. Reading and criticism of short stories by outstanding authors. Three credit hours.

SPAN 3332 Introduction to Spanish Literature
Prerequisite: SPAN 2311. History of the literature of Spain from the medieval period to the present. Three credit hours.

SPAN 3333 Selected Readings in Spanish Literature
Prerequisite: 3000-level Spanish course or consent of instructor. Reading and discussion of selected works from Spanish and Spanish American literature. Three credit hours.

SPAN 3334 Hispanic Culture: Peninsular
Prerequisite: SPAN 2311 or equivalent (or corequisite with consent of instructor). Historical, sociological, and cultural background of people of the Iberian peninsula. Three credit hours.

SPAN 3335 Hispanic Culture: Americas
Prerequisite: SPAN 2311 or equivalent (may be corequisite with consent of the instructor). Historical, sociological, and cultural background of Hispano-America. Three credit hours.

SPAN 4311 Literature of the Golden Age
Prerequisite: 3000-level Spanish course. Selected dramatic and prose writings of the Golden Age. Three credit hours.

SPAN 4331 Nineteenth-Century Literature
Prerequisite: 3000-level Spanish course. Readings and criticism of outstanding authors of this period. Three credit hours.

SPAN 4341 Twentieth-Century Literature
Prerequisite: 3000-level Spanish course. Writings of the “Generation of ‘98” and more recent authors. Three credit hours.

SPAN 4351 Spanish American Literature
Prerequisite: 3000-level Spanish course. Reading of works by several representative Latin American authors. Three credit hours.

SPAN 4361, 4362 Seminar
Prerequisite: Senior standing in Spanish or consent of instructor. Advanced topics in language, literature, or linguistics. May be repeated for maximum of 6 hours per seminar course. Three credit hours.

SPAN 4101, 4201, 4301 Independent Study
Prerequisite: consent of instructor. Reading from a selected bibliography in Spanish. Credit is determined at the beginning of the semester by the complexity of the problem and will not be altered. Open only to majors. One, two, or three credit hours.
**Chairperson:**
Bryan, Karen M., Professor

**Professors:**
Boury, Robert W.
Carenbauer, Michael G.
Holzer, Linda R.

**Associate Professors:**
Groesbeck, Rolf A.
Keating, Bevan T.
Richeson, David T.
Wen, Andy Y.

**Assistant Professors:**
Hakutani, Naoki
Lind, Vicki

**Instructors:**
Kincade, Trudy C.
Law, Charles P.
Marinova-Pavlov, Kristina
Underwood, Michael P.

**Research Associate:**
Spencer, James W.

---

The Department of Music provides quality learning opportunities for majors; serves the needs of the general student population; advances teaching, performance, creativity, research and scholarship among its faculty; and acts as an educational and cultural resource for the university, the city of Little Rock, and Central Arkansas. The department holds accreditation by the National Association of Music and the College of Education holds NCATE accreditation.

Our faculty includes noted artists, teachers and scholars. Music majors may take courses in performance study of classical music and jazz, music history, theory and composition. The 300-seat Stella Boyle Smith Concert Hall is the setting for the many concerts hosted by the department each year. Our facilities also include a state-of-the-art computer lab/classroom, fully mediated classrooms, and a fully equipped keyboard lab.

---

### General Information

#### Admission to Music Programs

All prospective music majors must successfully complete an audition for full admission to the department. Auditions comprise three components; students complete each of these to assist the music department in placing you in the appropriate classes:

1. **A performance audition of two contrasting piece on a chosen principal instrument/voice.** The results of the audition will determine placement with the appropriate private studio instructor and/or student ensemble. Additionally, the faculty uses the audition to determine if a student will receive a scholarship offer.

2. **Theory Placement Assessment.** This assessment ensures that students are familiar with conventions of musical notation in treble and bass clef, scales, key signatures, rhythm, meters and basics of triadic harmony, and allows the Music Department to place students in the appropriate music theory course(s).

3. **Keyboard Skills Evaluation.** Each music major at UALR is required to pass a piano proficiency. This evaluation places students in the appropriate group piano course or in the appropriate level of private instruction.

Students may audition on specified days set by the department each year, or by appointment with the Department.

### Scholarship Information

The Department of Music offers scholarships for qualified music majors. All scholarships are based on merit and are awarded after a live or recorded audition. Scholarship award conditions include meeting academic and enrollment requirements. Continuation of a music scholarship award is dependent upon affirmative evaluation of student work by UALR music faculty, maintaining a minimum GPA level, fulfilling performance requirements, and successful progress toward the declare major in music.

Grants-in-aid are available to students of any academic major for participation in selected ensembles. Grants are awarded for Concert Choir, Opera Performance, Gospel Chorale, the Trojan Pep Band, and the Wind Ensemble. Students holding grants are expected to maintain an appropriate grade point level. Renewal of grants is based on satisfactory review of student participation and academic standing. Grant-in-aid auditions are administered separately from scholarship auditions.

### Advisement

Each student is required to seek advising before registration. Department of Music faculty members serve as advisors for students in their area, and work with students concerning semester schedules and career issues.
Ensembles

Department of Music ensembles are open to all UALR students. Ensemble directors hold auditions at the beginning of each semester.

<table>
<thead>
<tr>
<th>VOCAL ENSEMBLES</th>
<th>INSTRUMENTAL ENSEMBLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chamber Choir</td>
<td>Community Orchestra</td>
</tr>
<tr>
<td>Opera Theatre</td>
<td>Trombone Choir</td>
</tr>
<tr>
<td>Community Chorus</td>
<td>Wind Ensemble</td>
</tr>
<tr>
<td>Opera Workshop</td>
<td>Chamber Ensembles</td>
</tr>
<tr>
<td>Concert Choir</td>
<td>Trojan Pep Band</td>
</tr>
<tr>
<td>Women's Chorus</td>
<td>Jazz Combo</td>
</tr>
<tr>
<td>Gospel Chorale</td>
<td>Guitar Ensemble</td>
</tr>
<tr>
<td></td>
<td>Indian Percussion Ensemble</td>
</tr>
<tr>
<td></td>
<td>Percussion Ensemble</td>
</tr>
</tbody>
</table>

Contact the Department of Music Office (501-569-3294) for information on joining these groups.

Degrees

The Department of Music offers a Bachelor of Arts in Music with four possible areas of emphasis: applied studies, music history and literature, music theory, or music education.

In addition to music courses, all tracks consist of the following elements:

- **Core Requirements.** All students must complete 44 hours of general education courses.
- **Minor.** All students must complete a minor in the field of their choosing. Minors comprise approximately 18 hours course work and will be chosen after consultation with an advisor in the Department of Music.
- **Language Proficiency.** All students must demonstrate proficiency in a language other than English or must complete courses through the Intermediate level (2311) to satisfy the UALR language proficiency requirement.

**Bachelor of Arts in Music: Music History**

Core Requirements (44 hours)
Second Language Proficiency
Academic Minor Coursework (18 hours)
Major Requirements (45 hours)
Music Theory (22 hours)
  - MUTH 2291 Aural Skills I
  - MUTH 2381 Music Theory I
  - MUTH 2292 Aural Skills II
  - MUTH 2391 Music Theory II
  - MUTH 3381 Music Theory III
  - MUTH 3231 Form and Analysis
  - MUTH 4190 Theory Capstone I
  - MUTH 4390 Theory Capstone II
  - MUTH Elective (3 hours)
Music History (9 hours)
  - MUHL 3322 Survey of Western Art Music
  - MUHL 3381 American Music
  - MUHL Elective
Music Performance-MUPR (8 hours)
Music Ensembles-MUEN (4 hours)
Piano Proficiency
Recital Attendance-MUAP 1000 (6 semesters)

**Bachelor of Arts in Music: Music Theory**

Core Requirements (44 hours)
Second Language Proficiency
Academic Minor Coursework (18 hours)
Major Requirements (45 hours)
Music Theory (22 hours)
  - MUTH 2291 Aural Skills I
  - MUTH 2381 Music Theory I
  - MUTH 2292 Aural Skills II
  - MUTH 2391 Music Theory II
  - MUTH 3381 Music Theory III
  - MUTH 3231 Form and Analysis
  - MUTH elective (3 hours)
Music History (9 hours)
  - MUHL 3322 Survey of Western Art Music
  - MUHL 3381 American Music
  - MUHL 4190 History Capstone I
  - MUHL 4390 History Capstone II
  - MUHL Elective
Music Performance-MUPR (8 hours)
Music Ensembles-MUEN (4 hours)
Piano Proficiency
Recital Attendance-MUAP 1000 (6 semesters)

**Bachelor of Arts in Music: Applied Music**

Core Requirements (44 hours)
Second Language Proficiency
Academic Minor Coursework (18 hours)
Major Requirements (45 hours)
Music Theory (18 hours)
  - MUTH 2291 Aural Skills I
  - MUTH 2381 Music Theory I
  - MUTH 2292 Aural Skills II
  - MUTH 2391 Music Theory II
  - MUTH 3381 Music Theory III
  - MUTH 3231 Form and Analysis
  - MUTH Elective (3 hours)
Music History (9 hours)
  - MUHL 3322 Survey of Western Art Music
  - MUHL 3381 American Music
  - MUHL Elective
  - Music Performance-MUPR (8 hours)
  - Music Ensembles-MUEN (4 hours)
Piano Proficiency
Recital Attendance-MUAP 1000 (6 semesters)

Electives (6 hours)
Group and Private Lesson

Group Lessons (MUAP)

The following performance classes are recommended for students with little or no formal musical training, who need to learn fundamentals of performance technique and reading music notation:

- MUAP 1203 Pop Guitar Class
- MUAP 1204 Voice Class I
- MUAP 1214 Piano Class I

Music Majors, Minors, and Elective Students (MUPR)

Private music lessons (one-to-one instruction) are available in the areas of guitar, piano, voice, percussion, and several other instrumental areas. Credits earned on the basis of lesson duration. An upper-level course number implies advanced proficiency in performance technique and repertoire.

- MUPR 1xxx-Minor or elective study, may be repeated for credit
- MUPR 2xxx-First-year principal performance area for music major, 2 semesters. By audition only.
- MUPR 3xxx-Second-year major study, 2 semesters. By passing jury for MUPR 2xxx only.
- MUPR 4xxx-Optional third-year major study, 2 semesters. By passing jury for MUPR 3xxx only (may be repeated for credit).

A one-credit lesson means a 30-minute lesson weekly, and requires a minimum of one hour of daily practice. A two-credit lesson means a 55-minute lesson weekly, and requires a minimum of two hours of daily practice. BA music majors are expected to perform at least once per year in a public recital such as Student Recital Hour.

An applied music fee is charged for all individual instruction. See “Tuition and Fees.” Audition repertoire guidelines are available from the instructor in each performance area, and on the department website.

Areas of instruction offered:

- —05 Trumpet
- —06 Percussion
- —15 French Horn
- —16 Voice
- —17 MIDI
- —25 Trombone
- —26 Piano
- —27 Jazz Piano
- —28 Improvisation
- —35 Euphonium
- —36 Harpsichord
- —45 Tuba
- —46 Organ
- —50 Classical Guitar
- —51 Electric Bass Guitar
- —55 Flute
- —56 Violin
- —65 Clarinet
- —66 Viola
- —75 Oboe
- —76 Cello
- —78 Jazz Guitar
- —79 Electric Guitar
- —85 Bassoon
- —86 String Bass
- —87 Jazz Bass
- —95 Saxophone
- —96 Harp

Minor in Music

The Music Minor is designed to provide opportunities in music for students who wish to pursue more detailed studies of the art, but who do not wish to complete one of the four areas of concentration. Courses for the minor may be drawn from any offered by the department for which the student meets the stated prerequisites. This curriculum is not intended to prepare a student for a career in music and does not certify a student to teach privately or in the public schools.

The minor consists of 19 semester hours, including the following:

<table>
<thead>
<tr>
<th>Music Theory</th>
<th>2-5 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music History and Literature</td>
<td>6 hours</td>
</tr>
<tr>
<td>Electives</td>
<td>8-11 hours</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19 hours</strong></td>
</tr>
</tbody>
</table>

Transfer students who minor in music will need to complete a minimum of 9 semester hours in the Department of Music at UALR.
Courses in Performance Studies (MUAP)

MUAP 1000 Recital Attendance
Attendance at concerts, recitals, student convocations, etc., as required by departmental policies.

MUAP 1100 Third-Age Piano Class
Prerequisite: Consent of the instructor. Designed for individuals who are interested in pursuing piano study in a less-formal group setting. Various technical, reading, and harmonization topics explored for performance of solo and ensemble works. May be repeated for credit. One credit hour.

MUAP 1201 Guitar Reading I
Prerequisite: MUAP 1203 with B or greater or consent of instructor. Based on audition to demonstrate familiarity with guitar and music fundamentals. Instrumental laboratory for guitarists, emphasizing reading studies in a variety of music styles. Two credit hours.

MUAP 1202 Guitar Reading II
Prerequisite: MUAP 1201 or consent of instructor. A continuation of Guitar Reading I with emphasis on chord chart reading. Compensating in various styles will be discussed and more advanced materials will be used to improve simple line reading. Two credit hours.

MUAP 1203 Pop Guitar Class
Designed as an alternative to conventional class guitar, this course teaches theory, technique, and control through the performance of songs in the pop-rock idiom. Class time is divided between the introduction of a concept or technique and its application in the songs provided. The course is open to anyone. Two credit hours.

MUAP 1204 Voice Class I
For beginning voice students. Application of vocal principles to develop singing facility. Group application of proper breathing, phrasing, and general attributes of correct vocal production. Two credit hours.

MUAP 1214 Piano Class I
For beginning piano students with little or no keyboard experience. Basic skills required to play the piano will be addressed in a group setting. Topics explored include piano technique, music reading, basic harmonization, transposition and theory and keyboard fundamentals. Two credit hours.

MUAP 1244 Voice Class II
Prerequisite: MUAP 1204 or consent of instructor. Group vocal instruction with emphasis on the development of vocal technique and individual performance of art songs. Two credit hours.

MUAP 1264 Piano Class II
Prerequisite: MUAP 1214 or consent of instructor. A continuation of Class Piano I designed to continue development of keyboard facility through technique, sight reading, harmonization, and a variety of solo and ensemble piano repertoire. Two credit hours.

MUAP 2218 Voice for Musical Theatre
Prerequisite: MUAP 1204 or consent of instructor. A vocal performance class studying the techniques for singing in musical theatre. Staging of individual numbers and audition preparation. Two credit hours.

MUAP 2284 Piano Class III
Prerequisite: MUAP 1264 or consent of instructor. Designed to hone the skills introduced in Piano Class II, with an emphasis on sight reading, playing from lead sheets, and on playing a variety of intermediate solo and ensemble repertoire from various stylistic periods. Two credit hours.

MUAP 2350 Songwriting
Organizational factors needed to identify the components of song form and integrate formal design and enlarged key areas into music. Designed for non-music and music majors. Three credit hours.

MUAP 2154, 2254, 2354 Special Topics
Prerequisites: MUAP 1204, 1244; 1214, 1264; or consent of instructor. Class vocal or piano instruction in various forms of musical repertoire and style, such as musical theatre, jazz and pop, or religious solos. One, two, or three credit hours.

MUAP 3224 Conducting I
Prerequisite: MUTH 2381 or consent of instructor. Fundamentals of conducting applicable to both instrumental and choral ensembles; patterns and basic conducting techniques; conducting of musical examples in both genres. Two credit hours.

MUAP 3265 Piano Skills
Prerequisite: MUAP 2284 with a grade of B or higher, and MUTH 2391, or consent of instructor. Beginning with an intensive review of basic functional piano skills, more advanced sight-reading at the keyboard, harmonization skills, improvisation techniques, simple accompaniments, and solo piano repertoire will be explored. Two credit hours.

MUAP 3325 Conducting II
Prerequisite: MUTH 3224 or consent of instructor. Conducting techniques relative to both choral and instrumental ensembles, including blend, balance, phrasing, diction, instrumental transposition, expressive devices and basic styles of choral/instrumental music literature; conducting of musical examples in both genres. Three credit hours.

Courses in Music Education (MUED)

MUED 3232 Early Childhood Music
The emphasis is on activities, creative projects, and developing vocal and instrumental skills useful to the early childhood teacher for both musical and non-musical integrated classroom activities. Students will develop skills in making lesson plans for musical activities and integrating music with the other arts, other subjects, and other peoples, places, and cultures. Not open to music majors for credit. Two credit hours.

MUED 3302 Piano Pedagogy
Prerequisite: completion of MUPR 2226 jury, and MUHL 2200, or consent of instructor. Study of methods and pedagogical material for piano teachers. Three credit hours.

MUED 3314 Vocal Pedagogy
Study of methods and pedagogical literature for voice teachers. Three credit hours.

MUED 3315 Teaching Choral Music in the Secondary Schools
An examination of materials and methods employed in middle school, junior high, and senior high choral music education. Emphasis on the general music program and nonperformance classes. Additional topics include procedures for administering choral and instrumental programs and scheduling. Three credit hours.

MUED 3322 Music in the Elementary Grades
Characteristics of child growth and their implications in music, establishing music objectives, translating objectives into a developmental sequence of experiences, understanding skills, and knowledge. A practical course for music teachers, emphasizing selection of music and methods of teaching of classroom music to children in elementary school. Three credit hours.

MUED 3332 Public School Music for Elementary Teachers
Provides instruction in rudiments of music; gives training in musical activities suitable for children through laboratory, lecture, and participation. Examines methods and materials for successfully teaching music to children in the elementary grades. Not open to music majors for credit. Three credit hours.

MUED 3352 Business of Music
The entire scope of the music industry is presented in a systematic, comprehensive review; from songwriters through publishing and record companies to television and radio. Three credit hours.
MUEN 4352 Piano Practicum  
Prerequisite: MUED 3302 and completion of MUPR 3226 jury. Practice teaching and observation of class instruction in piano at beginning levels for children and adults, and of individual instruction in piano from elementary through intermediate levels. Lesson plans and procedures for teaching specific concepts in piano performance. Three credit hours.

MUEN 4192, 4292, 4392 Special Studies and Workshops  
Prerequisite: consent of music chairperson. Individual and group participation in special studies and workshops in music education. One, two, or three credit hours.

MUED 4252 Perspectives on Careers in Music  
Prerequisite: must have passed the upper-level qualifying jury in MUPR, as well as MUTH 2371 and MUTH 2292, or consent of instructor. Course objective is to broaden the student's understanding of the range of careers in the world of professional music. The course will explore music as both a creative endeavor and as a product. Students will learn how music progresses from artistic creation to consumable product, and how the participants in the music business make a living utilizing skills in marketing, performance, teaching, recording, technology, venue management, etc. Dual listed in the Graduate Catalog as MUED 5252. MUED 5252 is not open to students who already have credit for 4252. Two credit hours.

Courses in Applied Music – Ensemble (MUEN)

MUEN 1104, 2104, 3104, 4104 Techniques of Accompanying  
Prerequisite: audition. A course designed to equip the keyboard major to function as an accompanist. This course offers both theoretical and practical experience. One credit hour.

MUEN 1113, 2113, 3113, 4113 University Concert Choir  
Prerequisite: audition scheduled with instructor. For experienced choral singers; open to students of any major. The concert choir is a large, select soprano, alto, tenor, bass (SATB) choral ensemble that performs with repertoire of selections representative of the Renaissance through the contemporary periods. One credit hour.

MUEN 1117, 2117, 3117, 4117 Chamber Singers  
Prerequisite: consent of instructor; open to students of any major. A small, select soprano, alto, tenor, bass (SATB) choral ensemble that performs repertoire from various stylistic periods especially written for performance by a small ensemble. One credit hour.

MUEN 1137, 2137, 3137, 4137 Pop Choir  
Prerequisite: consent of instructor. Small, select soprano, alto, tenor, bass (SATB) choral ensemble performing pop choral arrangements. Includes instrumental accompaniment. One credit hour.

MUEN 1140, 2140, 3140, 4140 Community Choir  
Prerequisite: audition and consent of instructor. Open to community members, UALR students, faculty, and staff of all experience levels. Prepares and performs major choral literature. May be repeated for credit. One credit hour.

MUEN 1150, 2150, 3150, 4150 Opera Performance  
Prerequisite: consent of instructor; open to students of any major. Study, through exercises and performances of acting techniques, that aids the singing-actor in the dramatic presentation of operatic repertoire. Once credit hour.

MUEN 1153, 2153, 3153, 4153 Jazz Ensemble  
Prerequisite: consent of instructor. An ensemble studying and performing music in the jazz and jazz-rock styles, with emphasis on instrumental repertoire. One credit hour.

MUEN 1160, 2160, 3160, 4160 Jazz Combo  
Prerequisite: consent of instructor. A small ensemble studying and performing music in jazz styles. One credit hour.

MUEN 1167, 2167, 3167, 4167 University Gospel Chorale  
A performance class that develops the execution of traditional, standard, contemporary, and original compositions of African-American gospel music. Vocal and instrumental techniques, as well as ensemble and improvisational skills, will be developed and improved. One credit hour.

MUEN 1173, 2173, 3173, 4173 Percussion Ensemble  
Prerequisite: consent of instructor. A small ensemble featuring repertoire written for a number of percussion instruments. One credit hour.

MUEN 1183, 2183, 3183 Piano Ensemble  
Prerequisite: consent of instructor. Ensemble performance involving piano duos from various musical periods. One credit hour.

MUEN 3183 Piano Ensemble  
Prerequisites: two semesters of MUPR 2226 (applied piano), consent of instructor. Ensemble performance involving piano duos from various musical periods. One credit hour.

MUEN 1188, 2188, 3188, 4188 Guitar Ensemble  
A performance class for guitarists and bass guitarists. Standard and original works arranged in jazz, pop, and rock styles; will develop reading ability, as well as ensemble and improvisational skills. One credit hour.

MUEN 1194, 2194, 3194, 4194 Basketball Band  
Prerequisite: consent of instructor. An ensemble that performs at UALR basketball games. One credit hour.

MUEN 1196, 2196, 3196, 4196 Chamber Ensembles  
Prerequisite: consent of instructor. Small chamber ensembles, such as trios, quartets, quintets, of woodwinds, brass, and stringed instruments for chamber music experiences. One credit hour.

MUEN 4101 Community Orchestra  
Prerequisite: consent of instructor; no audition required. Open to community members, UALR students, faculty, and staff of all experience levels. Prepares and performs music in all styles in the full orchestra medium. May be repeated for credit. One credit hour.

Courses in Music History and Literature (MUHL)

MUHL 2305 Introduction to Music  
Recommended prerequisite: RHET 1311. Introduction to the creative process and history of music, vocabulary and descriptive terms used in the musical arts, and how to write about them. Attendance at arts events is required. Students will learn through writing, reading, discussing, listening, and participating in critical thinking and problem-solving activities. Fulfills core requirement in aesthetics along with ARHA 2305 or THEA 2305. Three credit hours.

MUHL 3212, 3221, 3321 Special Topics  
Special topics in music history and music literature. Features certain composers, styles, media, or periods, such as Beethoven symphonies, African-American gospel music, and chamber music. One, two, or three credit hours.

MUHL 3322 Survey of Western Art Music  
Prerequisite: MUHL 2305. A survey of the development of Western art music from antiquity to the present, and an introduction to selected non-Western traditions, with emphasis on the study of music literature through recordings. Required for all BA music major emphases. Lecture. Three credit hours.

MUHL 3331 Music History I  
Prerequisites: MUHL 2305, MUTH 2381. A survey of the development of music in western civilization from antiquity to 1750, with emphasis on the study of music literature through scores and recordings. Three credit hours.
MUHL 3341 Music History II
Prerequisites: MUHL 3331, MUTH 2391. A continuation of Music History I. A survey of music in Western civilization from 1750 to the present. Three credit hours.

MUHL 3351 The History of Rock
A study of the evolution of rock music from its pre-rock origins to the present. Three credit hours.

MUHL 3361 Jazz History and Styles
Prerequisite: MUHL 2305, 3341, or consent of instructor. A study of the development and styles of jazz music and its principal exponents. Three credit hours.

MUHL 3370 History of the Blues
A comprehensive study of the origins and development, as well as the evolution, of blues forms from their origins to their present state. Three credit hours.

MUHL 3371 Non-Western Music
Prerequisite: MUHL 2305 or consent of instructor. A study of selected areas of world music outside Europe and North America through a variety of approaches: playing the music, clapping or singing, listening, studying it in its cultural context. Satisfies music literature requirement for music majors and minors. Three credit hours.

MUHL 3381 American Music
Prerequisite: MUHL 2305 or consent of instructor. A study of American musical traditions of the last four centuries, including classical, ragtime, jazz, blues, slave music, spirituals, gospel, musical theatre, white Protestant, popular, rock, American Indian, and country. Satisfies music literature requirement for music majors and minors. Three credit hours.

MUHL 4191, 4291, 4391 Special Studies
Prerequisite: consent of music chairperson. Special individual or group research in music history. One, two, or three credit hours.

MUHL 4311 Vocal Literature
Study of solo literature, history and materials for singers, including lieder, arias, songs, and song cycles. Three credit hours.

MUHL 4374 Piano Literature I
Prerequisite: MUED 3302, or consent of instructor. Study of solo piano literature, including Baroque preludes and fugues, dance suites, toccatas, Classical sonatas, and theme and variation sets, up to about 1800. Three credit hours.

MUHL 4377 Piano Literature II
Prerequisite: MUHL 4374, or consent of instructor. Continuation of Piano Literature I, with emphasis on Romantic études and character pieces, sonatas, and twentieth-century works. Three credit hours.

Courses in Music Theory (MUTH)

MUTH 1211 Rhythmic Skills
The rhythmic component of the music fundamentals package. This course will help develop the rhythmic control, accuracy, and notation skill necessary for performance, composition, and music education. Class time will be devoted primarily to ensemble performance of rhythms and development of rhythmic sight-reading ability. Lecture and laboratory. Two credit hours.

MUTH 1310 Music Fundamentals
This course is designed to serve both as a preparatory music theory course for the music major and as a music fundamentals course for the non-major or music minor. This course will fulfill the MUTH requirement for the minor. Students will learn about the fundamental rhythmic, melodic, and harmonic practices in Western music and the notational terms and symbols commonly used to communicate these aspects of a musical language. In addition to the study of written materials, students participating in this web-enhanced class will gain basic keyboard knowledge, basic aural skills and fundamental theory concepts through the use of computer-based theory tutorial software and various web-based theory tutorials. Lecture, laboratory, and online components. Upon completion of this course, students wishing to continue with music theory courses will be required to pass a theory fundamentals assessment with a grade of 80% or greater. Three credit hours.

MUTH 2291 Aural Skills I
Prerequisite: MUTH 2381. Corequisite: MUTH 2381. Diatonic music will be the focus of sight singing and dictation exercises. Listening techniques will include error detection, chord identification, triad factor identification, nonharmonic tones, and melodic dictation and sightsinging. The lab component will emphasize interval recognition and diatonic chord progressions. Lecture and laboratory. Two credit hours.

MUTH 2292 Aural Skills II
Prerequisites: MUTH 2291. Simple chromatic usage will be featured in melodic and harmonic dictation exercises. Musical examples will include chorale phrases, chord identification, error detection, two phrase music, two-part dictation and sightsinging short melodies from music literature. The lab component will emphasize melodic error correction, harmonic progressions, and melodic and rhythmic dictation. Lecture and laboratory. Two credit hours.

MUTH 2381 Music Theory I
Prerequisites: MUTH 1310 or equivalents, validated by placement test. Corequisite: MUTH 2291. This course is designed to serve both as a preparatory music theory course for the music major and as a music fundamentals course for the non-major or music minor. This course will fulfill the MUTH requirement for the minor. Students will learn about the fundamental rhythmic, melodic, and harmonic practices in Western music and the notational terms and symbols commonly used to communicate these aspects of a musical language. In addition to the study of written materials, students participating in this web-enhanced class will gain basic keyboard knowledge, basic aural skills and fundamental theory concepts through the use of computer-based theory tutorial software and various web-based theory tutorials. Lecture, laboratory and online components. Upon completion of this course, students wishing to continue with music theory courses within the major of music will be required to pass a theory fundamentals assessment examination with a grade of 90% or greater. This course may be repeated and/or taken for no credit. Three credit hours.

MUTH 2391 Music Theory II
Prerequisites: MUTH 2381 and MUTH 2291 with grades of C or greater for declared music majors, or consent of instructor or department advisor. Corequisite: MUTH 2292. Students will build on MUTH 2381 Theory I knowledge of rhythm, melody, and harmony by learning about and gaining mastery of the structural elements of music primarily of the Classical era with additional examination of elements from the Baroque and Romantic eras in Western music. In addition to the study of written and aural materials students will gain basic keyboard knowledge and aural skills in late 17th century and 18th century theory concepts through the use of computer-based theory tutorial software (Mac Gamut CAI), voice vocal part-writing exercises, choral, keyboard, chamber instrumental music and early concerto and symphonic practices. Lecture and laboratory. Three credit hours.
MUTH 3120, 3220, 3320 Special Topics
Prerequisite: four semesters of theory or consent of instructor based on placement examination. Harmonic or formal practices and styles such as fugue, sonata form, serial composition, or form and analysis. One, two, or three credit hours.

MUTH 3231 Form and Analysis
Prerequisite: MUTH 2292, 2391, grades of C or greater for declared music majors or consent of instructor or department advisor. A survey of forms, shapes and genres in music of the common practice period (1600-1900) emphasizing the designations and categories of form. Principles of variety and unity and the language of musical analysis in standard tonal structure will be the topic of study. Two credit hours.

MUTH 3330 Jazz Theory
A theoretical survey of jazz harmonic, melodic, and rhythmic principles beginning with blues and modal vehicles. Lecture and laboratory. Three credit hours.

MUTH 3381 Music Theory III
Prerequisites: MUTH 2391 with grades of C or greater for declared music majors or consent of instructor or department advisor. This third course in the music theory sequence will predominately focus on the chromatic elements found in texture, harmony, and melody of the music of the Romantic era as well as some of the chromatic elements within the Classical and Baroque eras of Western music. Students will gain and demonstrate knowledge of the period through written traditional Roman numeral score analysis, macro-analysis, chord building exercises, four-voice part-writing exercises, choral, keyboard, chamber instrumental music, and performance of keyboard reductions of sections from a variety of symphonic works; and, identify both aurally and through written score analysis characteristic modalities, harmonies (diatonic and chromatic), phrase and cadence types, and structural components of typical Beethoven, Chopin, and Wolf instrumental and vocal composition. Lecture and laboratory. Three credit hours.

MUTH 4310 Arranging
Prerequisite: MUTH 2391. A study of the characteristics and styles of arranging for band, orchestral instruments, and chorus. A historical survey of choral and instrumental writing in the Renaissance, Baroque, Classical, Romantic and Twentieth Century, with arranging exercises for each period. Three credit hours.

MUTH 4320 Basic Composition
Prerequisite: MUTH 2391 or consent of instructor. A study of methods and styles of musical compositions written by students. Various methods of beginning an original composition are discussed and demonstrated in addition to lectures and demonstrations on the small forms of composition. Students have the opportunity to apply prior theory knowledge and receive individual attention. Three credit hours.

MUTH 4340 Jazz Composition
Prerequisite: MUTH 3330 or consent of instructor. In this course, students write original compositions in the jazz idiom for varied media. Three credit hours.

MUTH 4190, 4290, 4390 Special Studies
Prerequisite: consent of music chairperson. Special individual or group research in music theory. One, two, or three credit hours.

MUTH 4230 Advanced Composition
Prerequisites: MUTH 2391, 4320, consent of instructor and approval of chair. Individual study of methods and styles of musical composition. May be repeated for credit. Two credit hours.
The Department of Philosophy and Liberal Studies offers undergraduate instruction leading to the baccalaureate degree in philosophy, a minor in religious studies, and a minor combining study in philosophy and religious studies. Students may choose to pursue a course of study within the baccalaureate degree in philosophy that emphasizes legal and moral studies that is designed to prepare them for early acceptance into UALR's William H. Bowen School of Law. The department also coordinates an undergraduate interdisciplinary degree in liberal arts, as well as graduate study leading to the master of arts in liberal studies. For more information, see our website.

General Information

Major in Philosophy

Why study philosophy? Because making a living is not the same as having a life. In Plato's *Republic*, Socrates tells a story about the navigator on a ship who is thrown overboard by the sailors, who see him as a useless stargazer: what is useful depends on whether you are focused on the task of steering the ship or the science of guiding it. To decide the right course of action, to wonder if a law is just, to analyze a speech or an article in the newspaper, to ask what you can do to help others or yourself, to engage any of the issues that make our lives worthwhile and meaningful-it is to do philosophy. The choice is not whether to do philosophy, but whether to do it well or poorly, to live or merely exist.

Because it is practical. When you study philosophy you learn how to think critically about any topic. That is why philosophy majors consistently score higher than other majors on the LSAT, GMAT, and GRE tests. The ability to think critically, argue persuasively, and solve problems—which are the foci of philosophical training—have become increasingly necessary for success in the rapidly changing work environment in which we live. The study of philosophy is an excellent preparation for the study of law, medicine, business, or theology.

Bachelor of Arts in Philosophy

Core Requirements (44 hours)

Second Language Proficiency

Philosophy Major Requirements (30 hours)

Foundation: 2 courses, 6 hours required
- PHIL 1310 Introduction to Philosophy
- PHIL 1330 Critical Thinking
  or PHIL 2350 Logic
History: 2 courses, 6 hours required
- PHIL 3320 Modern Philosophy
- PHIL 3321 19th and 20th Century Philosophy
- PHIL 3345 Ancient Greek Philosophy
- PHIL 4385 Seminar in History of Philosophy
Moral and Political: 1 course, 3 hours required
- PHIL 3335 Medical Ethics
- PHIL 3341 Contemporary Ethical Theory
- PHIL 3347 Philosophy of Law
- PHIL 4350 Classical Political Theory
- PHIL 4360 Modern Political Theory

PHIL 4386 Seminar in Social / Political
PHIL 4387 Seminar in Moral Philosophy
Mind, Knowledge, and Culture: 1 course, 3 hours required
- PHIL 3310 Theories of Knowledge
- PHIL 3312 Science and Culture
- RELS 3350 Eastern Thought
PHIL 4388 Seminar in Metaphysics and Epistemology
Electives: 4 courses, 12 hours required (9 hours of which must be upper-level), from any unused course above and:

PHIL 2320 Ethics and Society
PHIL 3315 Philosophy and Narrative
PHIL 3370 Existentialism
PHIL 3372 Philosophy and the Arts
PHIL 4333 Feminist Theory
PHIL 4373 Philosophy of Race
PHIL 4380 Topics in Philosophy
PHIL 4390 Independent Study

Instructor:
Guy, Clarence H.

Adjunct Faculty:
Burris, Mark
Burton, Larry
Franks, Matthew M.
Franks, Valerie T.
Hale, Edward
Hester, Micah
Jauss, Steve A.
Jones, Craig
Jones-Cathcart, Andrew
Levy, Gene
Musser, Robert
Self, Monty
Joint Bachelor of Arts degree in Philosophy (emphasis in Legal and Moral Studies) and Juris Doctor degree

The emphasis on legal and moral studies within the philosophy major is a cooperative program between the Department of Philosophy and the UALR William H. Bowen School of Law. This early acceptance program allows students to earn a BA and juris doctor (JD) in six years of full-time study (effectively fulfilling their minor requirements with their first successful year at the Law School), and grants acceptance into the UALR School of Law to those students who maintain the required standing in the program and fulfill certain requirements. Students in the program enter the School of Law in the beginning of their fourth year of undergraduate study. At the end of successful completion of the first year of the law curriculum, the students are awarded a BA in philosophy. At the end of their third year of study (or equivalent) at the School of Law, they are awarded a JD. For more information about the joint program, visit our website.

To achieve early admittance to Bowen, students must meet the following requirements:

• A major in philosophy with an emphasis in legal and moral studies.
• A grade point average of 3.5 or above.
• An LSAT score in the 75th percentile.
• Completion of all UALR Core Curriculum requirements, including the requirement of foreign language proficiency.

Once accepted to Bowen, students must take one of the jurisprudence courses offered there in their second or third year of law school study.

Students who do not meet these criteria may complete their undergraduate degree and apply to the William H. Bowen School of Law at the end of the equivalent of their fourth year of undergraduate study.

**JOINT DEGREE: BACHELOR OF ARTS IN PHILOSOPHY: MORAL/LEGAL STUDIES**

**Core Requirements (44 hours)**

**Second Language Proficiency**

**Degree Requirements (30 hours)**

Foundation: 2 courses, 6 hours required

- PHIL 1310 Introduction to Philosophy
- PHIL 1330 Critical Thinking
- or PHIL 2350 Logic

History: 2 courses, 6 hours required

- PHIL 3320 Modern Philosophy
- PHIL 3321 19th and 20th Century Philosophy
- PHIL 3345 Ancient Greek Philosophy
- PHIL 4385 Seminar in History of Philosophy

Moral and Political: 1 course, 3 hours required

- PHIL 3335 Medical Ethics
- PHIL 3341 Contemporary Ethical Theory
- PHIL 3347 Philosophy of Law
- PHIL 4350 Classical Political Theory
- PHIL 4360 Modern Political Theory
- PHIL 4386 Seminar in Social / Political
- PHIL 4387 Seminar in Moral Philosophy

Mind, Knowledge, and Culture: 1 course, 3 hours required

- PHIL 3310 Theories of Knowledge
- PHIL 3312 Science and Culture
- RELS 3350 Eastern Thought
- RELS 3360 Philosophy of Religion
- PHIL 4388 Seminar in Metaphysics and Epistemology

Electives: 4 courses, 12 hours required (9 hours of which must be upper-level), from any unused course above and:

- PHIL 2320 Ethics and Society
- PHIL 3315 Philosophy and Narrative
- PHIL 3370 Existentialism
- PHIL 3372 Philosophy and the Arts
- PHIL 4333 Feminist Theory
- PHIL 4373 Philosophy of Race
- PHIL 4380 Topics in Philosophy
- PHIL 4390 Independent Study

**Minor in Philosophy (18 hours)**

Foundation: 2 courses, 6 hours Required

- PHIL 1310 Introduction to Philosophy
- PHIL 1330 Critical Thinking
- or PHIL 2350 Logic

Electives: 4 courses, 12 hours Required

- PHIL 2320 Ethics and Society
- PHIL 3310 Theories of Knowledge
- PHIL 3312 Science and Culture
- PHIL 3315 Philosophy and Narrative
- PHIL 3320 Modern Philosophy
- PHIL 3321 19th and 20th Century Philosophy
- PHIL 3335 Medical Ethics
- PHIL 3341 Contemporary Ethical Theory
- PHIL 3345 Ancient Greek Philosophy
- PHIL 3347 Philosophy of Law
- RELS 3350 Eastern Thought
- RELS 3360 Philosophy of Religion
- PHIL 3370 Existentialism
- PHIL 3372 Philosophy and the Arts
- PHIL 4333 Feminist Theory
- PHIL 4350 Classical Political Theory
- PHIL 4350 Modern Political Theory
- PHIL 4373 Philosophy of Race
- PHIL 4380 Topics in Philosophy
- PHIL 4385 Seminar in History of Philosophy
- PHIL 4386 Seminar in Social / Political
- PHIL 4387 Seminar in Moral Philosophy
- PHIL 4388 Seminar in Metaphysics and Epistemology
- PHIL 4390 Independent Study

**Minor in Philosophy/Religious Studies (18 hours)**

3 required foundation courses (9 hours)

- PHIL 1310 Introduction to Philosophy
- PHIL 1330 Critical Thinking
- or PHIL 2350 Logic
- RELS 2305 World Religions

3 elective courses (9 hours)

- 1 upper-level course in Philosophy (PHIL)
- 1 upper-level course in Religious Studies (RELS)
- 1 elective course in either Philosophy or Religious Studies
Liberal Arts

The liberal arts degree program is an interdisciplinary approach to university studies. The major/minor program allows the student to combine aspects of several academic disciplines both within and outside of the College of Arts, Humanities, and Social Sciences (CAHSS).

BACHELOR OF ARTS IN LIBERAL ARTS

Core Requirements (44 hours)

Second Language Proficiency

Required courses:

LIST 3310 Reasoning Across the Disciplines
LIST 4310 Liberal Arts Colloquium (to be taken at the end of the student’s course of study)

Three disciplines of study (18 hours in each, 54 hours total):

Two disciplines must be within the CAHSS

This major does not require a minor.

One of the three 18-hour blocks may be taken outside of the College of Arts, Humanities, and Social Sciences. Those possibilities are not included in the list above. Each of the 18-hour concentrations must include the courses required for the minor in the chosen discipline unless an alternate sequence of courses is approved by the liberal arts coordinator. For minors that require more than 18 hours, students should consult their advisor.

For more information about the Liberal Arts major, visit the website.

Bachelor of Arts in Liberal Arts Online

The major in liberal arts can be completed wholly online. Interested students should contact Angela Paladino at 501-569-3411 or by email at arpaladino@ualr.edu. Program requirements are the same, but the areas that can be completed online are limited to the following areas within the College of Arts, Humanities, and Social Sciences:

<table>
<thead>
<tr>
<th>American Sign Language</th>
<th>International Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>Legal Studies</td>
</tr>
<tr>
<td>Arkansas Studies</td>
<td>Linguistics</td>
</tr>
<tr>
<td>Art</td>
<td>Music</td>
</tr>
<tr>
<td>Creative Writing</td>
<td>Nonprofit Leadership Studies</td>
</tr>
<tr>
<td>Dance</td>
<td>Philosophy/Religious Studies</td>
</tr>
<tr>
<td>Developmental Psychology</td>
<td>Photography</td>
</tr>
<tr>
<td>Digital Graphics</td>
<td>Political Science</td>
</tr>
<tr>
<td>English (Literature or ESL)</td>
<td>Professional and Technical Writing</td>
</tr>
<tr>
<td>Ethnic Studies</td>
<td>Psychology</td>
</tr>
<tr>
<td>Film Studies</td>
<td>Religious Studies</td>
</tr>
<tr>
<td>French</td>
<td>Sociology</td>
</tr>
<tr>
<td>Gender Studies</td>
<td>Spanish Studio Art</td>
</tr>
<tr>
<td>Geography</td>
<td>Theatre Arts</td>
</tr>
<tr>
<td>German</td>
<td>Technical Theatre/Design</td>
</tr>
<tr>
<td>History</td>
<td>Theatre Arts</td>
</tr>
<tr>
<td>Industrial Psychology</td>
<td>Writing (technical and nonfiction)</td>
</tr>
</tbody>
</table>

Areas outside the College of Arts, Humanities, and Social Sciences:

<table>
<thead>
<tr>
<th>Criminal Justice</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Sciences</td>
<td>Speech Communication</td>
</tr>
<tr>
<td>Management</td>
<td></td>
</tr>
</tbody>
</table>

For more information about the Liberal Arts major online, visit http://ualr.edu/ba/laol/

Minor in Religious Studies (18 hours)

Most people experience religion from within some particular religious tradition. However, to study religion from the academic standpoint is to adopt the perspective of a detached but empathetic observer. Using the tools and methodologies of the humanities and social sciences, the student of religion seeks to better understand the perspective of religious people, to map and explain the various elements of religious life, and finally, to evaluate the claims made by religious people and the role of religion in human life.

The minor is of value to students preparing for further study in religious studies or allied fields after graduation, such as graduate school or seminary, and to those who want to understand one of humanity’s most basic responses to life.

Foundation: 1 course, 3 hours Required

RELS 2305 World Religions

Major Religious Traditions: 1 course, 3 hours Required

RELS 3320 Christianity
RELS 3370 Judaism
RELS 3350 Eastern Thought
RELS 3336 Islam
RELS 4385 Seminar in Major Religions

Electives: 4 courses from any unused courses above and any of the below, 12 hours Required

RELS 2333 Introduction to Religious Studies
RELS 3330 Religious Countercultures
RELS 3333 Reading Sacred Texts
RELS 3338 Religion & Modern S. Asia
RELS 3340 Meditation Techniques
RELS 3360 Philosophy of Religion
RELS 3363 Psychology of Religion
RELS 4321 Religion, Society & Culture
RELS 4380 Topics in Religion

Courses in Liberal Studies (LIST)

LIST 3310 Reasoning Across the Disciplines
Students will study interdisciplinary processes and concerns that apply to the liberal arts, including reading and thinking critically, making effective arguments, exploring research techniques, and writing effectively. Three credit hours.

LIST 4310 Liberal Arts Colloquium
A capstone course. Students will employ interdisciplinary methodology and critical thinking skills to examine and evaluate an interdisciplinary topic. The development and presentation of an interdisciplinary thesis/project will also be required. Three credit hours.

Courses in Philosophy (PHIL)

PHIL 1110 Introduction to Ethics
Overview of ethical theory and moral reasoning; case-based approach emphasizing ethical issues in business and technology. Same as IFSC 1110. One hour lecture per week. One credit hour.

PHIL 1310 Introduction to Philosophy
Prerequisite: RHET 1311. Survey of basic themes in philosophy. Addresses such fundamental concerns as the nature of morality and beauty, the reasonableness of religious conviction, the nature of persons and the existence of free will, the status of animals and the environment, the relation of mind and body, the structure of a just society, and the nature of art through discussion and analysis of readings. Three credit hours.

PHIL 1330 Introduction to Critical Thinking
An introduction to reasoning skills. Focus on the recognition of informal fallacies, the nature, use, and evaluation of arguments, and the characteristics of inductive and deductive arguments. Three credit hours.
PHIL 2320 Ethics and Society
Prerequisite: RHET 1311. Study of selected texts reflecting a variety of ethical systems from Western and non-Western literary heritages and ethical traditions. Assigned works represent several national ethical literatures, with at least one major ethical text from each of four periods (antiquity, medieval, early modern, and contemporary). Three credit hours.

PHIL 2350 Introduction to Logic
Prerequisite: instructor consent. Introduction to deductive logic including translation of sentences into formal systems, immediate inferences, syllogisms, formal fallacies, proofs of validity, and quantification. Three credit hours.

PHIL 3310 Theories of Knowledge
Prerequisite: PHIL 1310 or PHIL 2320 or instructor consent. Introduction to the field of epistemology. Skeptical and realist positions will be assessed by analyzing internal and external accounts of knowledge (including coherence, foundation, naturalized, and reliabilist theories). The connection between epistemology and artificial intelligence will also be examined. Three credit hours.

PHIL 3311 Philosophy and Narrative
This course will focus on philosophical issues relevant to one or more of the following topic areas: philosophical issues in literature and film, theories of drama and performance, the politics of narrative, and recent hermeneutical theory. Three credit hours.

PHIL 3320 Modern Philosophy
Prerequisite: PHIL 1310 or PHIL 2320, or instructor consent. This course will examine the writings of early modern philosophers (including Descartes, Locke, Berkeley, Hume, and Kant) and their influence on nineteenth century philosophers (including Hegel, Marx, and Kierkegaard). Three credit hours.

PHIL 3321 19th and 20th Century Philosophy
Prerequisite: PHIL 1310 or PHIL 2320, or instructor consent (granted on the basis of similar preparation). This course investigates American, British and/or continental European philosophy after the eighteenth century, with an emphasis on selected major figures, works, or themes. Three credit hours.

PHIL 3330 Medical Ethics
Prerequisite: PHIL 1310 or PHIL 2320 or instructor consent. Analysis of ethical issues in medicine affecting patients, healthcare workers, and the public. Materials drawn from medical, legal, philosophical, and psychiatric sources, addressing such issues as euthanasia, abortion, assisted suicide, involuntary commitment, resource distribution, AIDS, and health insurance. Three credit hours.

PHIL 3341 Contemporary Ethical Theory
Prerequisite: PHIL 1310, or PHIL 2320, or instructor consent (granted on the basis of similar preparation). This course examines some fundamental issues in 20th-21st century ethical theory. In addition to exploring recent defenses and criticisms of leading normative theories, the course focuses on recent work in meta-ethics—in particular, debates about moral realism and non-realism. Three credit hours.

PHIL 3345 Ancient Greek Philosophy
Prerequisite: PHIL 1310 or PHIL 2320 or instructor consent. Philosophical positions of ancient Greek philosophers (Plato, Aristotle, Epicurus, and others) and their influence on medieval philosophers (Augustine, Aquinas, Averroes, and others). Three credit hours.

PHIL 3347 Philosophy of Law
Prerequisite: PHIL 2320 or PHIL 1310 or consent of instructor. Examination of topics and areas of study in jurisprudence such as the justification for coercion and punishment; the nature, moral foundation, and authority of law; liberty and freedom of expression under the law; feminist legal theory; critical race theory and other contemporary challenges. Three credit hours.

PHIL 3350 Eastern Thought
Prerequisite: 3 hours of Philosophy, or 3 hours of Religious Studies, or instructor consent. Survey of the beliefs, practices, and group structures of the major Eastern religious and social traditions (including Hinduism, Mahayana and Zen Buddhism, Shintoism, and Confucianism). Three credit hours.

PHIL 3355 Modern, German Idealism, Marx and Marxism
Prerequisite: PHIL 2320 or PHIL 1310 or instructor consent. Major issues in the philosophy of religion including the knowledge of God, the problem of evil, life after death, religious language and experience, and the relationship of faith and reason. Three credit hours.

PHIL 3370 Existentialism
Prerequisite: introductory philosophy course or instructor consent. Survey of the existential philosophers of the nineteenth and twentieth centuries including Kierkegaard, Nietzsche, Heidegger, Sartre, Camus, Jaspers, Marx, and Tillich. Three credit hours.

PHIL 3372 Philosophy and the Arts
This course investigates influential historical and/or contemporary contributions to aesthetics, philosophy of the arts, and philosophy of arts criticism. Topics may include: the nature of art and beauty; principles of criticism, standards of taste, and uniquely correct interpretations; the nature of an appropriate response to an artwork; the reality of aesthetic properties; and the relations between art, morality, and emotion. Three credit hours.

PHIL 3375 Feminist Theory
This course will study major issues in feminist theory, including historical and contemporary debates, and seeks a broad understanding of the development of various strands of feminist thought and the resulting range of interpretive possibilities. It may include explorations of feminist perspectives on epistemology, metaphysics, social and political theory, and ethics, as well as race, class, sexuality, and nationality. Three credit hours.

PHIL 3380 Classical Political Theory
Prerequisite: POLS 1310 or junior standing. Major political ideas and doctrines of political thinkers from Plato to Montesquieu, with emphasis on the contributions of each to the theory and practice of government. Dual-listed in the UALR Graduate Catalog as POLS 5380. Three credit hours.

PHIL 3385 Modern Political Theory
See course description for POLS 4390 Modern Political Theory.

PHIL 3373 Philosophy of Race
This course is an introduction to the philosophy of race and ethnicity. It will explore the philosophical assumptions behind concepts of race, including: 1) historical origins and contemporary views of race and racial identities; 2) the intersection of racism and other forms of oppression; or 3) race in the history of philosophy. Three credit hours.

PHIL 4280, 4380 Topics in Philosophy
Feminism, philosophy of art, metaphysics, and race theory are possible topics. Topics and course offering varies on demand. Two or three credit hours.

PHIL 4385 Seminar in History of Philosophy
Prerequisites: Phil 1310 and PHIL 2320 or Instructor Consent. This seminar allows participants to pursue intensive study of a pivotal movement or central figure in the history of philosophy or the development of a particular idea. Topics may include Plato, Hellenistic Philosophy, Stoicism, Skepticism: Ancient and Modern, German Idealism, Marx and Marxism, Rationalism, Logical Positivism, Analytic Philosophy, or Post-structuralism. Three credit hours.
PHIL 4386 Seminar in Social/Political Philosophy
Prerequisites: Phil 1310 and PHIL 2320 or Instructor Consent. This seminar allows participants to pursue intensive study of a pivotal movement or central figure in the history of philosophy or the development of a particular idea. Topics may include Plato, Hellenistic Philosophy, Stoicism, Skepticism: Ancient and Modern, German Idealism, Marx and Marxism, Rationalism, Logical Positivism, Analytic Philosophy, or Post-structuralism. Three credit hours.

PHIL 4388 Seminar in Metaphysics / Epistemology
Prerequisites: Phil 1310 and PHIL 2320 or Instructor Consent. This seminar course offers an opportunity to either explore in greater depth a topic within metaphysics or epistemology that has been introduced in other courses offered by the department or explore a topic that is not covered in other regularly offered courses. Three credit hours.

PHIL 4387 Seminar in Moral Philosophy
Prerequisites: Phil 1310 and PHIL 2320 or Instructor Consent. This seminar course offers an opportunity to either explore in greater depth a topic within moral philosophy that has been introduced in other courses offered by the department or explore a topic that is not covered in other regularly offered courses. Three credit hours.

PHIL 4290, 4390 Independent Study
Prerequisites: senior standing, 15 hours of philosophy, consent of instructor. Selective reading and written project on a topic submitted by the student and approved by the instructor before registration. Open only to students with demonstrated ability to write research papers of superior quality in philosophy. Applicants unknown to the instructor should submit academic transcripts and samples of their research papers in philosophy. Two or three credit hours.

Courses in Religious Studies (RELS)

RELS 2305 World Religions
Prerequisite: RHET 1311 recommended. Examines the global patterns of contemporary world religions as symbol systems and expressions of discrete, coherent world views. Three credit hours.

RELS 2333 Introduction to Religious Studies
An introduction to the study of religion. The theme may vary, but the course will highlight central issues that arise in studying religion from the academic standpoint—for example: the definition of religion, its characteristic features and functions, the “insider” vs. “outsider” perspective, the challenges that arise in comparing religions, and attempts to explain the origin of religion. Three credit hours.

RELS 3320 Christianity
Prerequisite: RELS 2305 or consent of instructor. A survey of major developments in the history of Christian thought from its origins in the New Testament through the Protestant Reformation. Three credit hours.

RELS 3330 Religious Countercultures
A cross-cultural survey of sects and cults throughout history, emphasizing contemporary groups in America. Examination of relevant issues concerning cults; the definitions of sect and cult; the relationship between cults and main line religions; brainwashing, deprogramming, government regulation. Same as ANTH 3366. Three credit hours.

RELS 3333 Reading Sacred Texts
This course is designed to provide both an opportunity to examine the texts of a particular religious tradition in detail and to introduce students to interdisciplinary methods for interpreting such texts. Three credit hours.

RELS 3336 Islam
Prerequisite: RELS 2305 or consent of instructor. An examination of the role of Islam as the primary cohesive element in the social, political, and cultural development of the modern Middle East. Comparison and contrast of Western and Middle Eastern perspectives on relevant current issues. Same as HIST 3336. Three credit hours.

RELS 3338 Religion and Modern South Asia
The role of religion (Hinduism, Buddhism, Islam, Christianity) in the formulation of South Asian responses to the processes of Anglicization, Westernization, and Modernization. Same as HIST 3338. Three credit hours.

RELS 3340 Meditation Techniques
Theoretical framework for understanding the meditation experience, namely, Jung’s depth psychology, yoga psychology, and Buddhist psychology; training in specific meditation techniques of various religious traditions, including Hatha Yoga, Zen, and the Silence, as well as the self-analysis of dreams. Three credit hours. Cross-listed as PSYC 3340.

RELS 3350 Eastern Thought
Prerequisite: 3 hours of Philosophy, or 3 hours of Religious Studies, or instructor consent. Survey of the beliefs, practices, and group structures of the major Eastern religious and social traditions (including Hinduism, Mahayana and Zen Buddhism, Shintoism, and Confucianism). Three credit hours.

RELS 3360 Philosophy of Religion
Prerequisite: 3 hours of Philosophy, or 3 hours of Religious Studies, or instructor consent. Major issues in the philosophy of religion including the knowledge of God, the problem of evil, life after death, religious language and experience, and the relationship of faith and reason. Three credit hours.

RELS 3363 Psychology of Religion
See PSYC 3363. Three credit hours.

RELS 3370 Judaism
Prerequisite: RELS 2305 or consent of instructor. A survey of major developments in the history of Jewish thought from its origins in the Hebrew Bible through the present. Three credit hours.

RELS 4180, 4280, 4380 Topics in Religion
Prerequisite: consent of instructor. Analysis of selected issues in religious studies. Course content will change. For descriptive title of the content, refer to the semester class schedule. One, two, or three credit hours.

RELS 4313 Apocalypse Now...and Then: A History of Apocalyptic Thought and Movements
See HIST 4313.

RELS 4315 Religious History of the United States
See HIST 4315.

RELS 4321 Religion, Society, and Culture
Introduction to the role of shamans, witches, diviners, cultic and magic belief systems, function of myth, ritual, religious symbolism, meaning of spirit possession, revitalization, and ancestor worship in tribal, peasant, and modern societies. Same as ANTH 4321. Three credit hours.

RELS 4340 Topics in Religion
Prerequisite: consent of instructor. Analysis of selected issues in religious studies. Course content will change. For descriptive title of the content, refer to the semester class schedule. One, two, or three credit hours.

RELS 4385 Seminar in Major Religions
This course provides for a more in-depth examination of a particular religious tradition. The tradition is typically non-Western and varies by semester. Check with the department for details. Three credit hours.

RELS 4290, 4390 Independent Study
Prerequisites: consent of instructor, see philosophy website for independent study guidelines. Selective reading and a formal written project on a topic submitted by the student and approved by the instructor at a conference in advance of registration. Open only to students with demonstrated ability to write research papers of superior quality in religious studies. Applicants unknown to the instructor should submit academic transcripts and samples of their research papers in religious studies. Two or three credit hours.
The Department of Political Science offers courses for students interested in understanding government and politics at the international, national, state, and local levels.

The mission of the department is to provide students with both a substantive knowledge of politics and the skills necessary to make use of that knowledge effectively, not only as private citizens participating in a democracy, but also in a wide range of careers. The department has implemented a program of assessment to measure achievement of these objectives. Students in the department are exposed to both the theory and practice of politics. The department’s faculty covers a broad range of substantive specializations, encompassing American politics, comparative politics, constitutional law, international relations, and political theory. Courses in the department also strive to instill in students a number of important skills, including critical thinking, analysis, writing, and the practical application of ideas to real world situations. The combination of substantive knowledge and practical skills instilled by courses in the department provides a solid background to help our students to excel as leaders in a variety of fields, including politics, government service, law, teaching, and business.

General Information

Knowledge Goals – students majoring in political science will be exposed to a wide range of substantive information about the world of politics, covering subjects such as:

- The history, characteristics, and impact of political institutions and systems, including international, national, state, and local governments
- The behavior of individual actors at both the mass and elite levels
- The processes involved in creating government policy and the impact of those policies
- The debates over the normative foundations of the state, the scope of its activities, and the nature of justice

Skill Goals – students majoring in political science will develop practical and marketable skills which will help them to apply that knowledge to any number of career paths. These skills include:

Critical thinking - the ability to read and evaluate primary texts, ideas, theories, and political analysis

Analysis/Research – the ability to pose and answer questions effectively

Argumentation/Persuasion – the ability to use logic and evidence to build a persuasive argument

Written and Verbal Communication - the ability to communicate ideas clearly on paper or through oral presentations

Working in Groups – the ability to effectively coordinate with others on a project

Practical Applications – the ability to take information gained through coursework and use it effectively in real world or simulated exercises

Degrees Available

The Department offers the following majors and minors:

- BA in Political Science
- BA in International Studies (Interdisciplinary Program)
- Minor in International Studies (Interdisciplinary Program)
- Minor in Middle Eastern Studies
- Minor in Political Science
- Minor in Legal Studies
- Minor in Presidential Studies
- Minor in Urban Studies

Secondary Teacher Licensure

See “Secondary Teacher Licensure” for details and contact the Department of Political Science as soon as possible for program advising.
Bachelor of Arts in Political Science

Core Requirements (44 hours)
Second Language Proficiency

Required Courses (6 hours)
- POLS 1310 American National Government
- POLS 2301 Introduction to Political Science

Students are required to take at least one upper level course in each of the following five fields:

American Political Institutions and Processes (3 hours)
- POLS 3300 American Political Parties
- POLS 3303 American State and Local Government
- POLS 3305 Elections and Public Opinion
- POLS 3320 The American Presidency
- POLS 3325 Legislative Process and Behavior

Comparative Politics (3 hours)
- POLS 3360 Comparative Government: Western
- POLS 3370 Comparative Politics: Developing Areas

Constitutional Law (3 hours)
- POLS 4350 Constitutional Law: Governmental Powers
- POLS 4351 Constitutional Law: Civil Liberties

International Relations (3 hours)
- POLS 4320 American Foreign Policy
- POLS 4340 International Relations

Normative and Empirical Analysis (3 hours)
- POLS 3302 Methods of Political Inquiry
- POLS 3390 American Political Thought
- POLS 4380 Classical Political Theory
- POLS 4390 Modern Political Theory

Upper Level Electives (12 hours)

Completion of a Minor

Minor in Presidential Studies
Joseph Giammo, Coordinator

The Presidential Studies minor enables students to gain a greater understanding of the presidency as an institution and as an actor within several arenas: government and politics, the economy, media and communications, and culture and society.

As an interdisciplinary minor, Presidential Studies allows students to study multiple approaches for understanding the presidency and different aspects of presidential behavior, the executive branch, and public policy. Course work in the program is designed to enhance students’ understanding of how the presidency and executive branch operate and the institution’s impact on society at home and abroad. The minor is well suited to combine with a major in Political Science, History, Journalism, Radio/TV/Film, Rhetoric and Writing, Speech Communication, and Professional and Technical Writing. This minor may be chosen as one of the concentrations in the Bachelor of Arts in Liberal Arts (BALA) curriculum.

The minor requires 21 hours. Students who declare the minor must be advised by the coordinator. Students’ individual needs and interests are important considerations in the course selection and advising process. During registration, students should confirm with the coordinator that the courses they plan to take meet the requirements for the minor. Students who plan to take online courses or courses at other campuses must first seek written approval from the coordinator and apply for concurrent enrollment.

Minor in Political Science

A minor in political science requires 18 credit hours, including POLS 1310 American National Government, POLS 2301 Introduction to Political Science, and at least 9 hours of upper-level courses.
The international studies program embraces an interdisciplinary curriculum which emphasizes global awareness in preparation for careers in international service. It enhances the development of advanced foreign language and communication skills and offers crucial insights into the scope of international and global problems.

The international studies curriculum is designed for students interested in seeking employment with a U.S. agency or company involved in international affairs, or attracted to work experience overseas. Military and diplomatic service, commercial enterprises, educational agencies, and development and human rights organizations offer opportunities for persons well-versed in global concerns. In addition, the international studies major provides a solid foundation for potential graduate study in the social sciences, the humanities, journalism, and international business and law.

Because of the rigorous nature and the complexity of this curriculum, students are encouraged to contact the international studies coordinator during their freshman year to become familiar with the program and to discuss a feasible course of study.

**Admission Requirements**
Prerequisites for formal admission to the international studies program include having a cumulative grade point average of 2.50 and completion of the following courses:
- RHET 1311 Composition I
- RHET 1312 Composition II
- HIST 1311 History of Civilization I
- HIST 1312 History of Civilization II
- GEOG 2310 World Regions
  or GEOG 2312 Cultural Geography
- FREN, GERM, or SPAN 1311, 1312 (or equivalent)
- ECON 2301 Survey of Economics

Additional prerequisites for students seeking an international studies degree with a business emphasis include:
- MKTG 2380 Legal Environment of Business

**Major in International Studies**
The international studies program comprises a major/minor consisting of 45-48 hours. The curriculum is divided into a set of International Studies foundation courses and an area of concentration.

**Area of Concentration**
In addition to the International Studies foundation courses the student will select an area of concentration. Options include Latin America, Europe, a private track emphasis, or an area designed by the student with the advisor’s approval. Possible choices include, but are not limited to; East Asian Studies, International Women’s Issues, Middle Eastern studies, or a diplomatic, environmental, or a developing nations emphasis. The area concentration consists of 18 hours of thematically clustered courses from various academic disciplines, an advanced foreign language course in culture or literature, an internship or cooperative education work experience, and a senior paper connected with the student’s specialization.

**Minor in International Studies**
The minor in international studies is designed for students who have an interest in foreign cultures and global affairs and would like to complement their major or career related field with foreign language and international skills.

The international studies minor consists of 21 hours. Students must complete an intermediate foreign language course (2311 or above), INTS 2301 and 2302, and 4 hours of related upper-level courses chosen in consultation with the international studies coordinator.
Minor in Legal Studies
Joseph Giammo, Coordinator.

The legal studies minor provides the opportunity to develop a greater understanding of law and legal institutions. The program is broadly humanistic, giving students a general knowledge of the institutional, philosophical, and historical character of the legal system. Course work in the program is designed to help students understand and use written and spoken language, to foster a critical understanding of the human institutions and values with which the law deals, and to stimulate creative thinking.

A minor in legal studies is not designed specifically to prepare a student for law school. There is no recommended major or minor for law school. If you are interested in attending law school, the best preparation is an undergraduate curriculum that requires you to investigate information, analyze it, and explain your conclusions clearly. Most often a broad liberal arts background is the best preparation for these tasks. See “Prelaw Studies” for further information about preparation for law school.

The minor requires 18 hours, which must be approved by the coordinator. No more than nine hours may be chosen from any one discipline. The student’s individual needs and interests are important considerations in the course selection process. This minor may also be chosen as one of the concentrations in the bachelor of arts in liberal arts curriculum.

Before beginning the program students should get a list of approved courses for the minor at http://ualr.edu/politicalscience/index.php/home/programs/minor-legal-studies/

Each student should complete one three-hour independent research project, subject to the approval of the coordinator, or an internship or field study program subject to the approval of the coordinator. Credit for this project will be provided by any independent study or equivalent course offered in the College or, if applicable, an internship or field-study program. For more information contact the coordinator in the political science department at (501) 569-3331 or dgiammo@ualr.edu.

Middle Eastern Studies
Clea Bunch, Chair (Responsible for public programs)
Faculty: Clea Bunch, History Department
Krista Lewis, Department of Sociology and Anthropology
http://ualr.edu/minors/mest

The Middle Eastern Studies minor is an interdisciplinary program that gives student the opportunity to study the Middle East in-depth by combining existing course offerings from a number of disciplines. The minor is available to students from a wide variety of majors, and is particularly valuable option for students majoring in International Studies, Political Science, Anthropology, or History. The minor consists of 18 credit hours, including three required upper-division courses in politics, cultures and history of the Middle East, and three elective courses with a focus on the Middle East. The list of available elective courses is expanding.

The minor is a part of a broader Middle Eastern Studies Program, funded by the King Fahd endowment. The program offers, on competitive basis, grants for Middle Eastern Studies students studying at UALR and for UALR faculty with interest in the Middle East. The program also supports a series of monthly lectures and events on the Middle East. For further information, please contact the program coordinator, Jacek Lubecki.

Minor description:

The minor requires 18 upper level hours to include:
POLS 4375/5375 Politics of the Middle East
ANTH 3319 Cultures of the Middle East
HIST 3336 Islam and the Modern Middle East OR
HIST 4390 “Islamic Civilization 600-1900” and 9 hours of elective credit selected from courses with a Middle Eastern focus including the following courses:
POLS 3301 Global Terrorism
RELS 3370 Judaism
RELS 3336 Islam
ANTH 4325 Egyptology
GEOG 4300 Geography of the Middle East
POLS 3101 Model Arab League

Students can transfer their credits for other minor-related coursework, including study of Middle Eastern Languages. Other elective courses may be substituted with prior consent of the program coordinator.

Courses in International Studies (INTS)

INTS 2301 World Cultures
A study of traditional culture of major world areas emphasizing values and systems that lead to cultural unity and cultural diversity, followed by a study of the modernization of each culture and the extent to which the cultures have interacted and changed as a result of intercultural contact during the 19th and 20th centuries. Three credit hours.

INTS 2302 Global Issues
A study of issues of concern throughout the modern world, the reaction of cultural entities to those issues, global dynamics, and the ways in which international assessments are made. Three credit hours.

INTS 3321 Topics in Modern International Cultures
Modern institutions and lifestyles in cultures selected from the major regions of Europe, Asia, Africa, and Latin America. The course emphasizes different patterns of behavior found in cultural areas outside the U.S. The specific focus of the course will vary from time to time. It may be repeated for credit if the content is different. Three credit hours.

INTS 3350, 3351 Cooperative Education Work Experience I and II
Prerequisites: major in international studies, INTS 2301, 2302, ECON 2321, FREN, GERM, or SPAN 2312, at least six upper-level required international studies hours, basic computer literacy, and consent of the international studies coordinator. Designed to complement and extend the classroom learning experience through application of theoretical concepts in a professional work environment with an international dimension. The exact number of work hours, activities, and responsibilities is dependent on the nature of the work experience and must be specified in a written agreement between employer and student in coordination with the Office of Cooperative Education. Three credit hours.

INTS 4101 Senior Research Project
Proposal. Required for international studies majors. An independent research project that is completed over two semesters under the guidance of a faculty supervisor whose field is related to the proposed area of investigation. The project has three components, consisting of a proposal (4101), a formal paper (4102), and an oral presentation (4103), each providing one hour of academic credit. A student may enroll in INTS 4102, 4103 only after completing an acceptable proposal (INTS 4101) in the previous semester. One credit hour.

INTS 4102 Senior Research Project
Formal Paper. Required for international studies majors. An independent research project that is completed over two semesters under the guidance of a faculty supervisor whose field is related to the proposed area of investigation. The project has three components, consisting of a proposal (4101), a formal paper (4102), and an oral presentation (4103), each providing one hour of academic credit. A student may enroll in INTS 4102, 4103 only after completing an acceptable proposal (INTS 4101) in the previous semester. Three credit hour.
INTS 4103 Senior Research Project
Oral Presentation. Required for international studies majors. An independent research project that is completed over two semesters under the guidance of a faculty supervisor whose field is related to the proposed area of investigation. The project has three components, consisting of a proposal (4101), a formal paper (4102), and an oral presentation (4103), each providing one hour of academic credit. A student may enroll in INTS 4102, 4103 only after completing an acceptable proposal (INTS 4101) in the previous semester. One credit hour.

INTS 4300 Seminar
For international studies majors. An integrative, in-depth study of a specified regional problem or global issue, related to the area of concentration, requiring analysis of traditional values and current issues and problems. Three credit hours.

INTS 4350 Internship
For international studies majors or minors. Field experience with businesses, industries, and agencies involved in the international arena. Supervised by the company or agency and a faculty member. Students are expected to apply theoretical concepts to active world situations and develop appropriate working skills and experience. Credit, no credit grading available on request. Three credit hours.

Courses in Political Science (POLS)
POLS 1310 American National Government
An introduction to the political institutions, processes, and patterns of the national government of the United States, focusing on the Congress, presidency, and courts, and on their interrelationships. Attention is given to suffrage and elections, political parties, interest groups, and public opinion. Significant issues and problems of national policy such as civil rights and civil liberties are considered. Three credit hours.

POLS 2301 Introduction to Political Science
Introduction to social science concepts as applied to political analysis. Analysis of individuals, groups, and society, particularly the study of social, economic, and political structures and behavior. Introduction to the discipline of political science as a social science, including enduring questions about politics, nature of political analysis, major theoretical and empirical approaches, and critiques of the discipline. Three credit hours.

POLS 3101 Seminar in Political Science
[See course description for]
POLS 3201 Seminar in Political Science
[See course description for]
POLS 3300 American Political Parties
Prerequisite: POLS 1310 or junior standing. The nature, function, and history of political parties in the United States and the process by which the will of the electorate is applied to public problems through suffrage, nominations, campaigns, and elections. Three credit hours.

POLS 3301 Seminar in Political Science
Prerequisite: POLS 1310 or junior standing. Special problems, issues, or trends in the theory and practice of politics and government. May be repeated with a change of subject and permission of department chairperson. One, two, or three credit hours.

POLS 3302 Methods of Political Inquiry
Introduction to basic research methods in empirical political analysis. Research design in political science; data collection techniques; data analysis and hypothesis testing; statistics and computer use for political science. Three credit hours.

POLS 3303 American State and Local Government
Problems of state and local government; the party system in the state; organization, functions, and powers of the legislative, executive, and judicial branches of the state government; organization and operation of county, city, village, and township government in the United States; emphasizes the effect of federalism on American state and local governments. Three credit hours.

POLS 3305 Elections and Public Opinion
Prerequisite: POLS 1310 or junior standing. The roles of elections and public opinion within the democratic system are thoroughly analyzed, with emphasis on factors leading to different electoral behavior and opinions within the public. Three credit hours.

POLS 3310 Policy Process
Prerequisite: POLS 1310 or junior standing. Surveys alternative approaches for analyzing policy making, the political and institutional context affecting the policy process, and selected public policies and decisions. Three credit hours.

POLS 3320 The American Presidency
Prerequisite: POLS 1310 or junior standing. Powers, duties, and responsibilities of our greatest executive officer, centering on historic and contemporary conceptions of the office; the presidency as an administrative institution. Three credit hours.

POLS 3325 Legislative Process and Behavior
Prerequisite: POLS 1310 or junior standing. Legislative politics in the United States Congress and state legislatures; socialization; role of party, constituency, and legislative institutions as they affect legislative behavior and public policy. Three credit hours.

POLS 3331 Public Administration
Prerequisites: POLS 1310 or junior standing. Trends and organization of public administration, fiscal and personnel management, administrative powers, and responsibility. Cross-listed with PADM 3331. Three credit hours.

POLS 3338, 3339 Cooperative Education in Political Science I & II
Prerequisites: declared major in political science; POLS 1310; and at least one upper-level course in political science, basic computer literacy, and consent of the department’s cooperative education coordinator. POLS 3303 is strongly recommended but not required. Cooperative Education in Political Science is designed to give a student majoring in the discipline an educationally applied field work learning experience. A maximum of six hours of Cooperative Education may be taken in the major. Three credit hours.

POLS 3348 Internship I
Prerequisites: at least 45 hours of completed work and permission of the instructor. Public service learning in an applied setting. Provides undergraduate students interested in politics and government with practical governmental experience. Students, through the writing of a primary internship paper and the attendance at periodic intern seminars, synthesize practical and theoretical learning in government, politics, and law. Three credit hours.

POLS 3350 Arkansas Government and Politics
Prerequisite: POLS 1310 or junior standing. A study of contemporary politics and government of Arkansas with a brief introduction to the state’s political history and a concentration on the twentieth-century experience. Topics include elections, the constitution, organization of Arkansas state and local government, and the operation of the executive, legislative, and judicial branches. Three credit hours.
POLS 4300, 4200, 4300 Independent Study
Prerequisites: senior standing, 15 credit hours of political science, consent of instructor. Advanced study and research. The student should prepare a prospectus before applying for independent study. One, two, or three credit hours.

POLS 4301 Judicial System and Process
A survey of state, local, and federal judicial systems and their interrelationships. Examines judicial structure, functions, and decision-making procedures. Three credit hours.

POLS 4302 Law and Society
An examination of the origins and history of law in society, including the evolving roles of judges, juries, defense attorneys, and prosecutors. Examines the evolution of civil and criminal law, the adversary system, and the concept of justice. Three credit hours.

POLS 4308 Topics in Urban Studies
In-depth analysis of selected urban topics and themes. Course emphasizes multidisciplinary nature of urban issues and various approaches used to characterize, investigate and understand urban phenomena. May be repeated for credit with a change of subject and permission of the department chairperson. Cross-listed as URST 4308. Dual-listed in the UALR Graduate Catalog as POLS 5308. Three credit hours.

POLS 4310 Seminar in American National Government
Prerequisite: senior standing. Research seminar dealing with selected phases of politics and government in the United States. It gives students the opportunity to bring analytical skills and substantive knowledge gained in prior courses to bear on a selected topic of importance, and will involve a substantial writing project. Dual-listed in the UALR Graduate Catalog as POLS 5310. Three credit hours.

POLS 4315 Capitol Hill Seminar
An introduction to politics and government in Washington, DC politics. Through meetings with Washington decision-makers from the three branches of government, the major governmental linkage institutions and lobbyists, congressional staff members, members of the media, think tanks, and political analysts, the course facilitates understanding of the theoretical and practical worlds of American politics from an insider, Capitol Hill, perspective. Three credit hours.

POLS 4320 American Foreign Policy
Prerequisite: POLS 1310 or junior standing. Examines the goals and motivation of American foreign policy and relations, the actors and processes that shape policies and decisions, and selected foreign policy problems and issues. Dual-listed in the UALR Graduate Catalog as POLS 5320. Three credit hours.

POLS 4331 International Organizations (IOs)
This course will explore the conception and modern functions of many International Organizations, and the international and domestic political forces that impact their effectiveness. We will study major governmental IOs, including the IMF, NATO, the UN, and the League of Arab States, as well as non-governmental IOs like Doctors without Borders and Amnesty International. In particular, the course will focus on the role of IOs in issues of war and peace, human rights, and development. Students will conduct research on and participate in International Organization “models” and will gain knowledge about the internal and procedural workings of IOs and the major issues the address. Three credit hours.

POLS 4333 Seminar in State Politics
Research seminar dealing with selected aspects of state politics such as comparative policy making, political culture variations, and problem solving. Dual-listed in the UALR Graduate Catalog as POLS 5333. Three credit hours.

POLS 4340 International Relations
Prerequisite: POLS 1310 or junior standing. Provides a conceptual foundation for understanding and analyzing the international system, states, and actors. Examines economic, political, and military aspects of national security, power, and national interest, and patterns of national decision making. Three credit hours.

POLS 4341 Seminar in International Relations
Special problems, issues, or trends in the study of international relations. May be repeated with a change of subject and permission of the department chairperson. Three credit hours.

POLS 4343 Seminar in Local Politics
Research seminar dealing with selected aspects of local politics such as community power structure, local autonomy, and comparative administration. Dual-listed in the UALR Graduate Catalog as POLS 5343. Three credit hours.

POLS 4345 The Clinton Presidency
Prerequisite: consent of the instructor. The presidency of Bill Clinton from several perspectives, all grounded in the discipline of political science: the administration’s policy making; presidential power and leadership; crises and turning points in the Clinton administration; campaigning and communications skill of the president; relations with the press, political parties and groups; and the legacy of the Clinton presidency. Dual-listed in the UALR Graduate Catalog as POLS 5345. Three credit hours.

POLS 4348 Internship II
Prerequisite: Senior standing and permission of the instructor. A public service learning experience which gives students the opportunity to blend practical concepts learned on the job with their academic course work in political science. Students attend periodic seminars and participate in a substantial writing assignment aimed at fully integrating and synthesizing their public service experience. Dual-listed in the UALR Graduate Catalog as POLS 5348. Three credit hours.

POLS 4350 Constitutional Law: Governmental Powers
Prerequisite: POLS 1310 or junior standing. The Supreme Court as a political institution in American democracy. Analysis of leading constitutional decisions exploring judicial review, federalism, separation of powers, regulation of commerce, due process, and equal protection. The dynamics of Supreme Court decision-making. Three credit hours.

POLS 4351 Constitutional Law: Civil Liberties
Prerequisite: POLS 1310 or junior standing. Civil liberties; analysis of leading constitutional decisions focusing on human freedom and fundamental rights. Emphasis on religious liberty, freedom of expression, racial equality, privacy, criminal procedures, and the dynamics of Supreme Court decision making. Three credit hours.
POLS 4355 Urban Planning and Land Use
A view of urban planning and land use from critical, analytical urban studies perspective. The course inquires into the meaning of planning for communities and cities. Course uses case studies to explore positive and negative impacts of planning technique and professionalism. Considers historical and modern alternatives to planning and subsequent land use and how urban planning and land use relate to quality of urban life. Dual-listed in the UALR Graduate Catalog as POLS 5355. Three credit hours.

POLS 4356 Urban Policy and Government
Course explores urban policy-making and urban government from a critical, analytical urban studies perspective. Considers historical and modern variations of urban government and intergovernmental relations and how this relates to urban policy making, political will and quality of urban life issues. Dual-listed in the UALR Graduate Catalog as POLS 5356. Three credit hours.

POLS 4360 Selected Topics in Political Science
Prerequisite: senior standing. The seminar provides students the opportunity to bring analytical skills and substantive knowledge gained in prior courses to bear on a selected topic of special importance, and will involve a substantial writing project. Students should inquire at the department for the topic that will be addressed in a given semester. Three credit hours.

POLS 4370 Readings in Political Science
Prerequisite: senior standing. In this readings seminar several outstanding books, including classics and notable current works, are assigned for analysis and discussion. The course is designed to give students an opportunity to consider fundamental themes that perennially concern the discipline: the nature of power, politics, and governance. Three credit hours.

POLS 4375 Politics of the Middle East
The course covers the politics and political dynamics of the Middle East, introducing the student to the main issues and actors (state and non-state) of the contemporary Middle East. The course explores the nature of contemporary politics in the region including the impact of the complex relationships among great power intervention, economics, ethnicity, nationalism, and religion. Three credit hours.

POLS 4376 Global Terrorism
The course will cover history, contemporary nature and defense against terrorism, with a particular emphasis on post 09/11 “war on terror.” Three credit hours.

POLS 4380 Classical Political Theory
Prerequisite: POLS 1310 or junior standing. Major political ideas and doctrines of political thinkers from Plato to Montesquieu, with emphasis on the contributions of each to the theory and practice of government. Dual-listed in the UALR Graduate Catalog as POLS 5380. Three credit hours.

POLS 4387 Great Decisions in American Foreign Policy
Prerequisites: POLS 1310, HIST 2311, or junior standing. Examines eight current foreign policy issues. Explores the origin of each issue, alternative proposals and strategies for American foreign policy, other nations’ proposals and strategies, and the consequences of past and current international problems for the United States and the world community. Dual-listed in the UALR Graduate Catalog as POLS 5387. Three credit hours.

POLS 4390 Modern Political Theory
Prerequisite: POLS 1310 or junior standing. A continuation of POLS 4380; from Edmund Burke to the present, with emphasis on the more recent political theories and systems of democracy, communism, and socialism. Dual-listed in the UALR Graduate Catalog as POLS 5390. Three credit hours.

POLS 4397 Social Studies Teaching Applications
A link between social studies content with practical applications for classroom instruction. Content information comes from history, geography, political science, sociology/anthropology, and psychology. Modeled for prospective secondary education teachers to illustrate how content can be applied in the classroom. Critical components of each of the disciplines integrated into the content presentations and the demonstrated applications. Team taught. Same as GEOG and HIST 4397. Three credit hours.

POLS 4399 Undergraduate Research Project
Prerequisite: Junior or senior standing, POLS 3302, 15 credit hours of political science, and consent of the instructor. Completion of a major research project in political science. The student should complete a research proposal before applying. Three credit hours.
The mission of the department is to be excellent in teaching, scholarship, and service. The department applies psychological knowledge, skills, and tools to further human welfare and to produce well-trained students. The Psychology Department continuously assesses the quality of its efforts and uses the data to make improvements in the program.

The department offers courses that serve three principal purposes: to help students understand themselves and others by studying factors influencing human behavior, to introduce students to the essentials of the scientific method as applied to behavioral research, and to provide a background for students intending to do graduate study in psychology or an allied field.

**General Information**

**Major in Psychology**

Minimum requirements for a psychology major are 34 hours of psychology (16 hours must be in residence) as specified below with a grade of C or greater in all psychology courses counted toward the major. Students pursuing a professional career in psychology are advised that the master's degree is the minimum training necessary. Prospective psychology majors, regardless of whether they plan to go to graduate school, should select courses with early and continuing advice from the department faculty. It is important that students plan their program of courses carefully. A wide range of courses is recommended as preparation for the requirements of different schools.

PSYC 3369, 3469, 4221, 4321, and 4495 are suggested to upper-level pre-professional majors. They provide experience in the actual work done by professional psychologists in ways not possible in lecture courses and are valuable credentials in application to graduate school. A maximum of six hours of these courses can be applied toward the major.

**Psi Chi Chapter**

Membership in the UALR Chapter of Psi Chi, the National Honor Society in Psychology, is available to students interested in psychology as a topic or as a profession, and who meet the membership requirements. Requirements are:

- Declaring a major or minor in psychology, or completing three semesters of college courses and nine semester hours of psychology courses.
- Having an overall cumulative GPA of 3.00, a minimum GPA of 3.00 in psychology courses, and a rank in the upper 35 percent of the class (undergraduates).

**Bachelor of Arts in Psychology**

| First-Year Colloquium (3 hours) |
| Core Requirements (44 hours) |
| Second Language Proficiency |
| Required Courses in Psychology (16 hours) |
| One course from the following (3 hours) |

| PSYC 3360 Abnormal Psychology |
| PSYC 3356 Developmental Psychology |
| PSYC 3330 Health Psychology |
| PSYC 3350 Social Psychology |

| One course from the following (3 hours) |
| PSYC 4320 Physiological Psychology |
| PSYC 3305 Sensation-Perception |
| PSYC 3380 Cognitive Psychology |
| PSYC 4330 Learning and Memory |

| One course from the following (3 hours) |
| PSYC 3370 Industrial Psychology |
| PSYC 4325 Personnel Psychology |
| PSYC 3375 Psychology Consumer Behavior |
| PSYC 4380 Human Factors Psychology |
| PSYC 4363 Organizational Psychology |

| Psychology Electives (9 upper-level hours) |
| Upper-Level Free Electives (12 hours) |
| Minor (18 hours) |
Minors in Psychology
The department offers three minors serving different objectives.

1. Industrial Psychology
2. Developmental Psychology
3. General Psychology

Students may not major and minor in psychology. All three minors require 18 hours, including PSYC 2300. For all minors, a maximum of three hours of independent study, internship, or practicum may be applied to the required hours. Students should be advised that it may take two years to complete a minor since some courses may be offered only every other year.

Industrial Psychology
The remaining 15 hours would be chosen from the following seven courses: applied psychology, personnel psychology, industrial psychology, organizational psychology, human factors psychology, psychology of consumer behavior, psychological tests, and the statistics course (PSYC 2340). A student may substitute a business or mathematics statistics course for psychological statistics. The minor in industrial psychology is designed to complement a variety of majors, including management, marketing, advertising/public relations, communication, education, sociology, and political science.

Developmental Psychology,
The remaining 15 hours would consist of the following courses: developmental, social and personality development, infancy, psychological disorders of childhood, and adolescence.

General Psychology
An additional 15 hours selected from any upper-level courses. It is flexible enough to permit the student to structure a program to meet personal needs and wishes.

Courses in Psychology (PSYC)

PSYC 2300 Psychology and the Human Experience
Prerequisite: RHET 1311. Focuses on development of the individual in the context of physical and social environments. Topics include the scientific method and its application to the study of the individual, the relationship between brain and behavior, social and personality development, theories of motivation, maladaptive behavior, social cognition and interaction, and the effects of membership in different groups. Students learn through writing, reading, discussing, listening, and participating in critical thinking and problem-solving activities. Three credit hours.

PSYC 2310 General Psychological Statistics
Prerequisite: MATH 1302 or 1315 or equivalent. A general survey of statistical methods in psychology, including descriptive and inferential techniques. Emphasis on application and interpretation of the statistical procedures. Course does not fulfill requirement for psychology majors, or count toward the minimum of 31 hours of psychology courses for majors. May be useful in preparation for required statistics courses. Accepted by some majors. See program advisor for information. Three credit hours.

PSYC 2340 Statistics and Methods I
Prerequisite: MATH 1302 or 1315 or equivalent. A study of descriptive research techniques. Emphasis on design and statistical analysis of descriptive experimentation. Topics include central tendency and dispersion, probability theory, frequency distributions, percentiles, correlation and regression. Three credit hours.

PSYC 3305 Sensation-Perception
Prerequisite: PSYC 2300. Study of the perception external events and sensory processes underlying that perception. Three credit hours.

PSYC 3308 Urban Environmental Psychology
Prerequisite: PSYC 2300. Study of the effects of physical environments on individuals. Topics include individual perceptions of local environments, pollution, and energy costs; individual privacy needs versus crowding; unique environments, such as wilderness, museums, and zoos; and the design of more livable homes. Three credit hours.

PSYC 3310 Motivation and Emotion
Prerequisite: PSYC 2300. Detailed coverage of important forms of human motivation and cursory treatment of emotions. Three credit hours.

PSYC 3320 Introduction to Applied Psychology
Prerequisite: PSYC 2300. An introduction to the application of psychology to a variety of problems concerning mental and physical health, communication, motivation, the use of tests and other psychological techniques in industry and government, social engineering, environmental issues, and the legal system. Also covers careers in psychology, their educational requirements, and career planning. Three credit hours.

PSYC 3330 Health Psychology
Prerequisite: PSYC 2300. A study of the inter-relationship between psychology and health. Topics include research regarding the mind-body connection, the causes of stress and how stress impacts health, behavioral contributions to an individual’s or community’s health status, and the ways in which health is being re-conceptualized. Three credit hours.

PSYC 3340 Meditation Techniques
Theoretical framework for understanding the meditation experience, namely, Jung’s depth psychology, yoga psychology, and Buddhist psychology; training in specific meditation techniques of various religious traditions, including Hatha Yoga, Zen, and the Silence, as well as the self-analysis of dreams. Cross-listed as RELS 3340. Three credit hours.

PSYC 3341 Research Methods I
Prerequisite: PSYC 2340 with grade of “C” or greater. A study of inferential research techniques, with an emphasis on the design and statistical analysis of controlled experimental procedures. Topics include sampling procedures and distributions, hypothesis testing, within and between subjects designs, tests of the difference between two means, and one-way and factorial analyses of variance. Three credit hours.

PSYC 3342 Statistics and Methods II
Prerequisite: PSYC 2340 with a “C” or greater. A study of inferential research techniques, with an emphasis on the design and statistical analysis of controlled experimental procedures. Topics include sampling procedures and distributions, hypothesis testing, within and between subjects designs, tests of the difference between two means, and one-way and factorial analyses of variance. Three credit hours.

PSYC 3350 Social Psychology
Prerequisite: PSYC 2300. An introduction of theories, research, and problems regarding interrelationships of social structure, interpersonal interaction, and behavior of individuals. Topics include human aggression, prejudice, attraction, persuasion, self-perception, and conformity. Three credit hours.

PSYC 3356 Developmental Psychology
Prerequisite: PSYC 2300. Development of the individual from conception through adolescence. Topics include prenatal, intellectual, emotional, social, and personality development. Three credit hours.
PSYC 3357 Infancy
Prerequisite: PSYC 2300, 3356, or consent of the instructor. Theory and research on the psychological development of infants. Topics include sensory and perceptual development, intellectual development, social and emotional development, and physical development during the first two years of life. Three credit hours.

PSYC 3358 Adolescent Psychology
Prerequisite: PSYC 2300, 3356, or consent of instructor. Theory and research on the psychological development of adolescents; physical, social, personality, and intellectual development during adolescence; major theories concerning adolescence. Three credit hours.

PSYC 3360 Abnormal Psychology
Prerequisite: PSYC 2300. The causes, symptoms, and treatment of abnormalities in human behavior. Three credit hours.

PSYC 3363 Psychology of Religion
Prerequisite: PSYC 2300 or consent of instructor. Various interpretations of religious experience in terms of modern Western psychology and their use in religious counseling. Varieties of religious experiences, psychological interpretations of religious experiences, religion and stages of human development, and techniques of religious counseling. Three credit hours.

PSYC 3365 Fundamentals of Psychosexual Behavior
Prerequisite: PSYC 2300. The emotional, attitudinal, and developmental parameters of human sexual motivation and behavior; masculinity-femininity; sexual deviation; and prevalent sexual behaviors. Three credit hours.

PSYC 3366 Psychology of Women
Prerequisite: Psychology 2300. The study of the psychology of women, emphasizing the different views of women in our society, the bases of these views, and their implications for men and women. Three credit hours.

PSYC 3368 Psychology Cooperative Education
Prerequisites: completed 30 semester hours with a 2.50 GPA overall, PSYC 2300, six upper-level hours in psychology and consent of the psychology department coordinator and the director of cooperative education. Transfer students must have completed one semester in residence. Prerequisite or corequisite: PSYC 2340 or 2310. Designed to complement and extend the classroom learning experience through the application of psychology-based concepts, skills, and technology in a professional work environment. PSYC 3368 normally requires 200 hours per semester with the employer. Number of work hours, activities, and responsibilities depends on the nature of the work and must be specified in a written agreement coordinated with the course instructor and the Office of Cooperative Education. Grading is based on the criteria of the written agreement and is the responsibility of the instructor. Three credit hours.

PSYC 3369, 3469 Internship
Prerequisites: junior standing, consent of instructor. Provides practical experience in a professional urban setting. Students work in a business, government agency, state mental health institution, or similar location giving opportunities to apply their academic background to develop applied skills. Three or four credit hours.

PSYC 3370 Industrial Psychology
Prerequisite: PSYC 2300. A survey of the field of industrial psychology. Application of psychological principles to prediction, performance criteria, job analysis, employee evaluation, training, work environment, management, motivation, and job satisfaction. Recommended for business students and those interested in applied psychology. Three credit hours.

PSYC 3375 Psychology of Consumer Behavior
Prerequisite: PSYC 2300. Psychology of advertising; motivational, perceptual, social, and learning variables influencing consumer choice. Recommended for advertising, marketing, business, and psychology majors. Three credit hours.

PSYC 3380 Cognitive Psychology
Prerequisite: PSYC 2300. An introduction to theories and research regarding human information processing. Topics include attention, memory, problem solving, information representation, and individual differences in cognitive ability. Three credit hours.

PSYC 4100 Senior Synthesis
Prerequisite: senior standing and 18 hours in psychology, or consent of instructor. Capstone course, applying knowledge and skills from previous psychology courses. One credit hour.

PSYC 4300 Drugs and Behavior
Prerequisite: PSYC 2300, senior standing, or consent of instructor. An analysis of the effects of drug administration on ongoing behavior and learning. Emphasis on drugs of clinical application and usage. Dual-listed in the UALR Graduate Catalog as PSYC 5300. Three credit hours.

PSYC 4301 Drug Abuse
Prerequisite: PSYC 2300. A study of drug abuse and addiction with an emphasis on pharmacological, psychological, and behavior aspects of abused drugs. There is also an emphasis on the differing treatments used in the attempt to control these addictions. Three credit hours.

PSYC 4310 Counseling Psychology
Prerequisite: PSYC 2300, senior standing, or consent of the instructor. A survey of the field of counseling and its philosophy, with emphasis on the counseling relationship. Educational, vocational, industrial, and personal counseling are covered. Dual-listed in the UALR Graduate Catalog as PSYC 5310. Three credit hours.

PSYC 4320 Physiological Psychology
Prerequisite: PSYC 2300. Principal neuroanatomical structures, with emphasis on their behavioral correlates. Three credit hours.

PSYC 4221, 4321 Independent Study
Prerequisite: senior standing psychology major, consent of the professor. Readings and research in various areas of psychology. Two or three credit hours.

PSYC 4325 Personnel Psychology
Prerequisites: PSYC 2300, three hours of statistics. Analysis of industrial psychology in terms of personnel work. Topics include predictors and related issues, criteria and related issues, statistical analysis for selection and placement, testing, interviews and other non-test procedures, personnel development, and attitude measurement. Dual-listed in the UALR Graduate Catalog as PSYC 5325. Three credit hours.

PSYC 4330 Learning and Memory
Prerequisite: PSYC 2300. Fundamental principles of conditioning and learning. Topics include traditional and modern approaches to reinforcement, punishment, generalization, discrimination, constraints on learning, and applications of learning principles. Dual-listed in the UALR Graduate Catalog as PSYC 5330. Three credit hours.

PSYC 4335 Personality and Social Development
Prerequisite: PSYC 2300. Recommended: PSYC 3356. Examines the interaction between developing children and the social environment and the implications for adult personality using an Eriksonian stage model. Constitutional predispositions, parental care giving, modeling, peer interaction, and social institutions considered. Three credit hours.

PSYC 4336 Cognitive Development
Prerequisite: PSYC 2300, 3356, and senior standing or consent of the instructor. An introduction to the theories and research on the development of thinking in infants, children, and adolescents. Dual-listed in the UALR Graduate Catalog as PSYC 5336. Three credit hours.
PSYC 4340 Shaping of Human Behavior
Prerequisite: PSYC 2300, and senior standing or consent of the instructor. A study of the application of principles of learning and conditioning to the shaping of the behavior of people in a variety of settings. Ethical issues in changing human behavior. Dual-listed in the UALR Graduate Catalog as PSYC 5340. Three credit hours.

PSYC 4345 History of Psychology
Prerequisite: PSYC 2300. An examination of concepts, methods, and systems that have contributed to the development of modern psychology. Provides excellent preparation for the Advanced Psychology GRE. Three credit hours.

PSYC 4355 Psychology of Personal Adjustment
Prerequisite: PSYC 2300. A study of the healthy personality, emphasizing characteristics, development, and promotion of mental health. Three credit hours.

PSYC 4363 Organizational Psychology
Prerequisite: PSYC 2300 or consent of the instructor. An analysis of the interplay of individuals and the organizations for which they work. Topics include job satisfaction, motivation, morale, leadership, group dynamics, conflict, communication, union-management relations, and organizational growth and development. Three credit hours.

PSYC 4365 Psychological Disorders of Childhood
Prerequisite: PSYC 2300, and senior standing or consent of instructor. A study of childhood psychoses, attention deficit disorder, autism, depression, behavior problems, and the abused child. Dual-listed in the UALR Graduate Catalog as PSYC 5365. Three credit hours.

PSYC 4370 Psychology of Personality
Prerequisite: PSYC 2300 and PSYC 3360. A critical survey of modern approaches to the organization and development of personality, with extensive reading to integrate experimental, clinical, biographical, and cultural evidence. Three credit hours.

PSYC 4380 Human Factors Psychology
Prerequisite: PSYC 2300. An analysis of relevant information about human behavior for the design of physical objects people use, the methods for their use, and the design of environments in which people live and work. Three credit hours.

PSYC 4385 Psychology and Public Health
Prerequisites: PSYC 2300, and senior standing, or consent of the instructor for undergraduates; graduate standing for graduates. Considers how psychological science and applications can help shape community health and public health efforts. Issues related to health psychology research, community psychology, preventive health, and public health practice will be considered. Will explore innovative public health models in which psychological science or applications have been prominent. Dual-listed in the UALR Graduate Catalog as PSYC 5385. Three credit hours.

PSYC 4290, 4390 Senior Seminar
Prerequisite: PSYC 2340 and senior status in psychology major. Topics vary with instructor. Two or three credit hours.

PSYC 4397 Social Studies Teaching Applications
A link between social studies content with practical applications for classroom instruction. Information comes from history, geography, political science, sociology/anthropology, and psychology. Content modeled for prospective secondary education teachers to illustrate how content can be applied in the classroom. Critical components of each discipline integrated into the content presentations and the demonstrated applications. Team taught. Three credit hours.

PSYC 4412 Computer Applications in Psychology
Prerequisite: consent of instructor. The basic instrumentation involved in psychological research, with emphasis on the use of programming language in experimental situations and interfacing microcomputers with common laboratory equipment. Two hours lecture, four hours laboratory per week. Four credit hours.

PSYC 4450 Experimental Psychology
Prerequisites: PSYC 2300, 2340. General methodological principles and techniques of psychological experimentation. Students design, conduct, analyze, and report experiments in their areas of interest. Three hours lecture, two hours laboratory. Four credit hours.

PSYC 4460 Psychological Tests: Composition and Interpretation
Prerequisite: PSYC 2300, three hours of college-level statistics, and senior standing. An extensive treatment of reliability and validity, norms, and standardization. The construction and use of common psychological tests are considered. Dual-listed in the UALR Graduate Catalog as PSYC 5460. Four credit hours.

PSYC 4495 Practicum in Psychology
Prerequisites: senior standing, consent of instructor. The student will perform independent laboratory research or assist in the instructional process. Four credit hours.
The department offers students first-year composition, a variety of specialized courses to help improve writing skills, a major in professional and technical writing, and a master’s degree in professional and technical writing. The department also maintains the University Writing Center, where all students who wish to work on specific writing needs are welcome.

**General Information**

**First-Year Composition**

The first-year composition sequence consists of RHET 1311 Composition I and RHET 1312 Composition II. These courses fulfill the UALR core curriculum requirements. Students must complete RHET 1311 with a grade of C or greater before enrolling in RHET 1312. Together, these courses help students develop the writing skills needed to pursue a college degree. In addition, RHET 0310 Composition Fundamentals is offered for students who are not prepared for RHET 1311.

**Honors composition**

Students with an ACT English score of 27 or greater who have an A or B in high school English are invited to enroll in RHET 1320 Honors Composition. Students who feel they qualify for Honors Composition but who do not receive invitations should contact the Department of Rhetoric and Writing office at (501) 569-3160. RHET 1320 satisfies the core curriculum requirement in written literacy.

**Exempting RHET 1311**

Students with an ACT English score of 29 or greater or a COMPASS score of 99 or greater are automatically exempted. They may enroll either in RHET 1320 or in RHET 1312 to complete the core curriculum composition requirement.

**Testing out of composition**

Students who feel they already have the requisite skills of either RHET 1311 or 1312 may attempt to complete these requirements by examination. For information about test dates, required fees, and test content, students should contact the Office of Testing Services. The tests parallel the contents of RHET 1311 and 1312. A student who successfully tests out of a course will receive no grade but will receive three credit hours toward graduation.

**Transfer students**

Students transferring 60 or more hours to UALR who have met the first-year composition requirement at the college previously attended may be exempted from UALR’s first-year composition requirement. The decision to exempt a student is made by the student’s major department chairperson when the student files a degree plan.

**Degrees**

**Major in Professional and Technical Writing**

After admission to UALR, any student may declare a major in Professional and Technical Writing. To discuss the major, students are encouraged to visit the Chair of the Department of Rhetoric and Writing in SUB 100. Appointments may be arranged by calling (501) 569-3160.

### Bachelor of Arts in Professional and Technical Writing

<table>
<thead>
<tr>
<th>Core Requirements (44 hours)</th>
<th>RHET 3326 Technical Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTW majors are encouraged to take MCOM 2330</td>
<td>RHET 3317 Nonfiction</td>
</tr>
<tr>
<td>Mass Media and Society as part of their Social Sciences requirement in the Core.</td>
<td>RHET 4305 Document Design</td>
</tr>
<tr>
<td></td>
<td>RHET 4301 Theories of Rhetoric and Writing</td>
</tr>
<tr>
<td></td>
<td>RHET 4190 Colloquium in Rhetoric and Writing</td>
</tr>
<tr>
<td></td>
<td>15 upper-level credit hours of RHET electives, not RHET 3316, not more than six hours total in the following:</td>
</tr>
<tr>
<td></td>
<td>internships, independent writing projects, and/or upper-level MCOM courses.</td>
</tr>
</tbody>
</table>

**Second Language Proficiency**

**Major Requirements (36 hours)**

- RHET 3200 Introduction to Professional and Technical Writing
- RHET 3301 Editing for Usage, Style, and Clarity
- RHET 3315 Persuasive Writing

Note to majors about sequencing of courses: The Department of Rhetoric and Writing strongly advises that, as much as possible, majors take required courses in the following sequence:
Courses in Rhetoric

**RHET 0310 Composition Fundamentals**
Practice in writing, with an emphasis on developing fluency and editing. This course does not fulfill the core curriculum requirement and is intended for students who are not ready for RHET 1311. Institutional credit only; final grades are A, B, C, or NC. Three credit hours.

**RHET 0321 Academic Literacy**
Practice in academic writing and reading with an emphasis on developing strategies and skills for college success: reading and writing fluency, editing techniques, reading comprehension, and vocabulary development. This fulfills the requirement for developmental reading and writing, but does not fulfill a core curriculum requirement. Institutional credit only; final grades are A, B, C, or No Credit. This is a combined lecture/lab course. Three credit hours.

**RHET 1311 Composition I**
Prerequisite: A minimum ACT English score of 19, a minimum SAT I verbal score of 450, RHET 0310, or RHET 0321. Practice in writing, with an emphasis on personal, expressive writing, as well as transactional writing. Students will focus on organizing and revising ideas and writing well organized, thoroughly developed papers that achieve the writer's purpose, meet the readers' needs, and develop the writer's voice. Final course grades are A, B, C, or NC. Students must complete this course with a grade of C or greater to take RHET 1312. Three credit hours.

**RHET 1312 Composition II**
Prerequisite: RHET 1311 with a C or greater or equivalent. Those students required by state law to enroll in READ 0310 must successfully complete that course before enrolling in RHET 1312. Practice in writing, with an emphasis on academic forms. Students will focus on analysis, argumentation, research, and documentation writing. Final course grades are A, B, C, or NC. Three credit hours.

**RHET 1320 Honors Composition**
For students with superior achievement in English. Fulfills first year composition core curriculum requirement. Admission by invitation. Three credit hours.

**RHET 1110 Composition Fundamentals Writing Laboratory (The University Writing Center)**
Individualized supplemental help for students enrolled in RHET 0310 or 1311. Practice in basic grammar and writing skills. May be used as a refresher course before taking RHET 1311; may be used to prepare for composition test-outs. Graded CR/NC. One credit hour.

**RHET 1130 Writing on Computers (The University Writing Center)**
A practical course for writers to use the computer in the composing process. Students will learn one word processing program well, integrate it into their individual writing processes, and use other software that supports writing on computers. One credit hour.

**RHET 2100 Writing Laboratory (The University Writing Center)**
Individualized supplemental help for students enrolled in RHET 1312 or who have completed composition courses. May be used as a refresher course. Graded CR/NC. One credit hour.

**RHET 2312 Advanced Composition**
Prerequisite: RHET 1312 or equivalent. A course designed to offer the student advanced practice in essay and other academic writing forms; includes review of composition modes as well as grammar and mechanics. The course is especially appropriate for returning, transfer, and other students who want or need additional writing practice in preparation for performance in upper-level coursework, or students who wish additional writing practice before entering a writing major. Three credit hours.

**RHET 3200 Introduction to Professional and Technical Writing**
Prerequisite: RHET 1312 or the equivalent. An introduction to the Rhetoric and Writing major and professional and technical writing theory and practice. Two credit hours.

**RHET 3300 Introduction to Research**
Prerequisite: RHET 1312 or the equivalent. Introduction to quantitative and qualitative research methods and the research process as applied to the study of written communication. Three credit hours.

**RHET 3301 Editing for Usage, Style, and Clarity**
Prerequisites: RHET 1311 and 1312 or equivalents. An introductory editing course that focuses on basic editing and proofreading skills. Course includes review of grammar, punctuation, and mechanics. Editing practice includes work with the student's own writing as well as secondary texts. Three credit hours.

**RHET 3315 Persuasive Writing**
Prerequisite: RHET 1312 or the equivalent. A theoretical and practical introduction to the art of written persuasion. Emphasis on persuasive techniques and their ethical consequences. Three credit hours.

**RHET 3316 Writing for the Workplace**
Prerequisite: RHET 1312 or the equivalent. Study and practice of workplace communication required of professionals who write as part of their jobs. Emphasis on developing a sense of audience and purpose, writing in teams, and learning problem solving strategies. Intensive practice writing workplace documents such as memos, letters, e-mail, résumés, and reports. Three credit hours.

**RHET 3317 Nonfiction**
Prerequisite: RHET 1312 or the equivalent. Study and practice of nonfiction writing to explore, investigate, and explain ideas, experiences, and perspectives. Emphasis on style, voice, revision, and collaboration. Three credit hours.

**RHET 3320 Contemporary Issues in Language and Rhetoric**
Prerequisites: RHET 1311 and 1312 or equivalents. A study of contemporary issues in language research from rhetorical and social perspectives. Three credit hours.

**RHET 3326 Technical Writing**
Prerequisite: RHET 1312 or the equivalent. Intensive instruction in the theory and practice of technical communication. Emphasis on understanding audience, establishing a clear purpose, using technology, acquiring a sense of the profession, and developing strategies for successfully producing individual and collaborative documents. Practice writing genres such as reports, instructions, descriptions, specifications, and proposals. Three credit hours.

**RHET 4100, 4200 Independent Writing Project**
Prerequisites: senior standing, 12 hours of upper-level RHET courses. For the student of superior ability who wishes to undertake an independent writing project. One or two credit hours.
RHET 4190 Colloquium in Rhetoric and Writing
Prerequisite: senior standing. Focuses on professional development and synthesizes the major concepts within rhetorical/writing theory. One credit hours.

RHET 4202 Teaching Writing in Secondary Schools
Prerequisite: RHET 1312. A methods course team-taught by faculty from the Departments of English and Rhetoric and Writing. Topics include making classroom presentations, managing small-group work, responding to student writing, evaluating and using secondary school literature and composition textbooks, and learning approaches to teaching literature and writing. Taken in conjunction with ENGL 4202. Dual-listed in the UALR Graduate Catalog as RHET 5202. Two credit hours.

RHET 4191, 4291 Writing Internship
Prerequisites: junior standing, consent of director. On-the-job training for students planning to enter a writing career or teach writing. For assignment, see the director of the University Writing Center in the Department of Rhetoric and Writing. CR/NC grading optional. One or two credit hours.

RHET 4301 Theories of Rhetoric and Writing
Prerequisites: RHET 3315 with a grade of C or greater, or consent of instructor. A study of theories of rhetoric and writing. Dual-listed in the UALR Graduate Catalog as RHET 5301. Three credit hours.

RHET 4304 Technical Style and Editing
Prerequisites: RHET 3301 with a grade of C or greater, or consent of instructor. Survey and study of institutional and industrial style manuals. Intensive practice in editing technical, business, government, and scientific reports. Dual-listed in the UALR Graduate Catalog as RHET 5304. Three credit hours.

RHET 4305 Document Design
Prerequisite: RHET 3316 or 3326. Study and practice of the use of visual elements in technical communication. Emphasis on typography, page layout, data displays, pictorial communication, and usability testing for both print and online documents. Dual-listed in the UALR Graduate Catalog as RHET 5305. Three credit hours.

RHET 4306 Writing for Business and Government
Prerequisite: RHET 3316 or 3326 with a grade of C or greater, or consent of instructor. Theory of and practice in writing for government and business organizations. Topics will include training manuals, job descriptions, policy writing, records, and correspondence. Dual-listed in the UALR Graduate Catalog as RHET 5306. Three credit hours.

RHET 4307 Writing Software Documentation
Prerequisite: RHET 3316 or 3326 with a grade of C or greater, or consent of instructor. Study and practice of writing documentation for computer software, including printed manuals, tutorials, reference guides, and online help systems. Emphasis on analyzing prospective users and their tasks, interviewing subject matter experts, developing help for different levels of users, writing user-friendly text, editing documentation for style and clarity, and working on a documentation team. Intensive practice with RoboHELP HTML software for composing online help. Dual-listed in the UALR Graduate Catalog as RHET 5307. Three credit hours.

RHET 4315 Advanced Persuasive Writing
Prerequisite: RHET 3315 with a grade of C or greater, or permission of the instructor. Intensive study of classical and new rhetorics. Emphasis on solving rhetorical problems. Dual-listed in the UALR Graduate Catalog as RHET 5315. Three credit hours.

RHET 4317 Advanced Nonfiction Writing
Prerequisite: RHET 3317 with a grade of C or greater, or consent of the instructor. An advanced nonfiction writing class. Study and practice of writing to explore, investigate, and explain. Students will write a variety of professional, scholarly, and popular essays. Dual-listed in the UALR Graduate Catalog as RHET 5317. Three credit hours.

RHET 4321 Editing for Publication
Prerequisite: RHET 3301. A hands-on experience in pre-production editing for publication. Includes study of the editing process, manuscript acquisition, the peer review process, manuscript editing, editorial correspondence, and pre-production manuscript preparation. Dual-listed in the UALR Graduate Catalog as RHET 5521. Three credit hours.

RHET 4325 Legal Writing, Reasoning, and Argument
Prerequisite: RHET 3315 or permission of instructor. Designed for all majors, particularly for pre-law students and writers interested in the discourse of the law. Students will read a variety of judicial decisions on current issues such as Freedom of Speech and complete several relatively short assignments focusing on legal reasoning and argument. Students will also learn how to find information on legal decisions and issues. Dual-listed in the UALR Graduate Catalog as RHET 5325. Three credit hours.

RHET 4331 History of Rhetoric I: Beginnings to 1800
Prerequisites: RHET 3315, RHET 3316 or RHET 3326, and RHET 3317, all with a grade of C or greater, or consent of instructor. A study of major theorists and practitioners of rhetoric from classical times through the eighteenth century. Dual-listed in the UALR Graduate Catalog as RHET 5331. Three credit hours.

RHET 4332 History of Rhetoric II: 1800 to Present
Prerequisite: RHET 4331 with a grade of C or greater. Study of major nineteenth- and twentieth-century theorists. Dual-listed in the UALR Graduate Catalog as RHET 5332. Three credit hours.

RHET 4345 Topics in Persuasive Writing
Prerequisite: RHET 3315 with a grade of C or greater, or consent of the instructor. Theory and practice of persuasion with topics varying each semester. Dual-listed in the UALR Graduate Catalog as RHET 5345. Three credit hours.

RHET 4346 Topics in Technical Communication
Prerequisite: RHET 3316 or RHET 3326 with a grade of C or greater, or consent of the instructor. The theory and practice of technical communication; topics vary each semester. Dual-listed in the UALR Graduate Catalog as RHET 5346. Three credit hours.

RHET 4347 Topics in Nonfiction Writing
Prerequisite: RHET 3317 with a grade of C or greater, or consent of the instructor. Theory and practice of nonfiction writing with topics varying each semester. Dual-listed in the UALR Graduate Catalog as RHET 5347. Three credit hours.

RHET 4371 Writing on the Web
Prerequisite: RHET 3316 or RHET 3326 with a grade of C or greater, or consent of instructor. Ability to compose effective technical writing and/or computer competency. Introduction to basic web design and construction; course emphasizes audience(s), purpose(s), and accessibility issues such as web site navigation, multiple browsers, and ADA compliance. Dual-listed in the UALR Graduate Catalog as RHET 5371. Three credit hours.

RHET 4375 Grant Writing
Prerequisites: RHET 3316 or RHET 3326 with a grade of C or greater, or consent of the instructor. Survey, theory and practice of grant writing (solicited and non-solicited) and the philanthropic sector. Topics include, but are not limited to, finding and researching a foundation, resources for each stage of the grant writing process, developing a problem statement, creating objectives and goals, creating a budget, and working with foundations. Dual-listed in the UALR Graduate Catalog as RHET 5375. Three credit hours.

RHET 4395, 4396 Cooperative Education
Prerequisite: RHET 3315, 3316, or 3317; recommendation of the departmental cooperative education coordinator. Designed to complement and extend the classroom learning experience through the application of theoretical concepts in a professional workplace. Exact number of work hours, activities, and responsibilities depend on the work experience and must be specified in a written agreement between the employer and student in coordination with the Office of Cooperative Education. Three credit hours.

RHET 4398, 4399 Senior Writing Project
Prerequisites: senior writing major or minor with 12 hours of upper-level courses. Student will complete either a portfolio or a final project written in cooperative arrangement with advisor from both major and minor department. Three credit hours.
The department offers courses and programs designed to teach students to analyze and understand basic socio-cultural processes, statuses, and roles; to this end, we conduct a yearly assessment to determine how well we have achieved these objectives. The department also prepares students for careers and graduate study in sociology, anthropology, health services administration, public administration, and social work; contributes to the liberal arts training and knowledge of all undergraduates; and provides intellectual skills for students considering careers in these professions and in business.

**General Information**

**Awards and Scholarships**

**Katherine J. Hardie Award in Anthropology**

This award is given to the outstanding graduating senior in anthropology each year. The recipient’s name will be engraved on the Hardie Memorial Plaque displayed in the department office. In addition, the recipient will receive an individual plaque.

**Outstanding Graduate Award in Sociology**

This award honors the graduating senior sociology major who has the highest grade point average.

**Mark Hartmann Anthropology Student Fellowship**

The purpose of this award is to provide financial assistance to students for participation in anthropological field work or field school concurrently with their studies in pursuit or enrichment of a degree in Anthropology at the University of Arkansas at Little Rock. Expenses covered by this award may include, but are not limited to, tuition and related travel expenses.

**Libbet Crandon-Malamud Memorial Scholarship**

Awarded to a UALR junior or senior with a minor in Gender Studies and with plans to pursue graduate education in the field of gender or women’s studies. Must have a 3.0 GPA.

**Beth and Earl Richard Endowed Scholarship**

This scholarship is awarded to a full or part-time UALR student major in sociology/anthropology. Selection is based on academic accomplishment with financial need as a secondary consideration.

**Student Organizations**

The department seeks to promote a sense of collegiality among students. This is reflected in the student-governed Sociology Club (Sarah Beth Estes and Adriana Lopez-Ramirez, faculty sponsors), and Anthropology Club (Katie King, faculty sponsor). Students new to the department should check with the faculty sponsors for meeting times and activities. In addition, the honors sociology organization, Alpha Kappa Delta, and the honors anthropology organization, Lambda Alpha, provides majors with a 3.00 grade point average or above access to professional and social activities.

**Field Experience**

Field experience opportunities are available and highly recommended for all majors. Placements are offered in nearly 50 public and private agencies and organizations throughout central Arkansas. A list of current opportunities is available in the department office.

**Prerequisites**

The department requires that prerequisites be met for all classes. Students wishing to enroll in a course without the specified prerequisite courses must petition the department for permission to enroll.

**Bachelor of Arts in Anthropology**

<table>
<thead>
<tr>
<th>Core Requirements (44 hours)</th>
<th>ANTH 4382 Anthropological Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Language Proficiency</td>
<td>ANTH 4316 Linguistic Anthropology</td>
</tr>
<tr>
<td>Major Requirements (19 hours)</td>
<td>ANTH 4395 Senior Seminar in Holism</td>
</tr>
<tr>
<td>ANTH 1415 Physical Anthropology</td>
<td>ANTH Electives (13 hours) $^3$</td>
</tr>
<tr>
<td>ANTH 2316 Cultural Anthropology</td>
<td>Note 3: ANTH 3381 and 4485 are strongly recommended.</td>
</tr>
<tr>
<td>ANTH 3313 Archaeology</td>
<td></td>
</tr>
<tr>
<td>or ANTH 4600 Principles of Archaeological Research</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Arts in Sociology

Core Requirements (44 hours)

Second Language Requirement (6 hours)

Major Requirements (30 hours)

SOCI 2300 Introduction to Sociology
SOCI 3381 Social Statistics
SOCI 3383 Classical Sociological Theory
or SOCI 3384 Contemporary Sociological Theory
SOCI 3385 Research Methods
SOCI 4387 Seminar in Applied Sociology

15 upper-level credit hours of SOCI courses approved by the department chairperson.

Minors Available

Minor in Sociology

A minor in sociology requires 18 credit hours of sociology, including SOCI 2300 Introduction to Sociology and either SOCI 3383 Classical Sociological Theory or SOCI 3384 Contemporary Sociological Theory.

Minor in Anthropology

A minor in anthropology requires 18 credit hours of anthropology, including ANTH 1415 Physical Anthropology and ANTH 2316 Cultural Anthropology.

Minor in Gender Studies

The Gender Studies program is an 18-hour interdisciplinary minor. The minor is designed to help students understand and define the changing roles of women and men brought about by social, economic, political, legal and other changes in society.

Requirements for the minor include an introductory course, 2300; a senior-level seminar, GNST 4300; and 12 hours chosen in consultation with the gender studies coordinator from GNST 3315, 3333, 3340, 3346, 3350, 3366, 3388, 4190, 4195, 4290, 4295, 4371, 4372, 4390, and 4395.

Other courses may be accepted with the consent of the coordinator. For more information, contact the coordinator at (501)-569-3173, or by email at sbestes@ualr.edu.

Nonprofit Leadership Studies

Juliana Flinn, Campus Director

Nonprofit Leadership Studies (formerly American Humanics) is a competency-based minor and certificate program designed to prepare and certify students to work for nonprofit organizations. To complete the minor and earn the Nonprofit Leadership Studies certificate, students must demonstrate that they have acquired the Nonprofit Leadership Studies competencies. The Nonprofit Leadership Studies Campus Director is responsible for certifying that a student has acquired the required competencies.

Students acquire these competencies through the following:

- A minimum of 180 contact hours, fulfilled through
  - 18 hours of approved courses in the minor (see list below)
  - Participation in approved workshops or seminars;
  - A minimum of 300 hours of internship (for six credit hours);
  - Participation in the Nonprofit Leadership Studies Student Association and a Nonprofit Leadership Studies Management Institute.

Courses in Sociology (SOCI)

SOCI 2300 Introduction to Sociology
Recommended: RHET 1311. Introduction to sociological concepts. Analysis of society, particularly the study of human organization. An overview of the theories and methods utilized in the discipline is provided and will be used as a framework for critical analysis. Students will learn to investigate group and societal connections in major social institutions-religion, family, politics, economics, education. Three credit hours.

SOCI 2301 World Cultures
See INTS 2301.

SOCI 3300 Sociology of Sports
An overview of sports in the contemporary United States; covers the athletes, the spectators (on site, television, and radio), the therapeutic functions for individuals, and the impact of sports on other institutions in society. Explores the commercialization of sports and its effects on other economic activities. Three credit hours.

SOCI 3312 North American Indians
Prerequisite: ANTH 2316. A study of Indian cultures from the Arctic to northern Mexico from immediately after European contact to the present. Three credit hours.

SOCI 3316 Japanese Culture and Society
Prerequisite: ANTH 2316 or SOCI 2300. The anthropological and sociological study of Japanese culture and society; covers Japanese history, major social institutions, and aspects of culture that are unique to Japan. Three credit hours.

SOCI 3318 Sexuality, Society, and Culture
See ANTH 3318.

SOCI 3330 Racial and Minority Groups
Prerequisite: SOCI 2300. Analysis of social processes in a pluralistic society, with emphasis on the cultural contributions and ethos of the different ethnic groups. Three credit hours.
SOCI 3333 Women in a Changing Society
Prerequisite: SOCI 2300. An analysis of the socialization of women for their ascribed roles, with emphasis on the molding forces of culture and the changes taking place in women’s roles in contemporary US and other societies. Three credit hours.

SOCI 3334 Social Problems
Prerequisite: SOCI 2300. Application of sociological principles to the study of social problems, such as juvenile delinquency, sex-based inequality, educational systems, ethnic groups, ethnic group conflict, crime, industrial conflict and unemployment, poverty, and the maintenance of a free society. Three credit hours.

SOCI 3335 Sociology of Deviant Behavior
Prerequisite: SOCI 2300. A survey of deviant behavior in modern society. Emphasis on the theories and causes of deviant behavior, including societal reactions and deviant action and reaction in the contemporary United States. Emphasis on the various theoretical orientations used in sociology today. Three credit hours.

SOCI 3336 Criminology
Prerequisite: SOCI 2300. The nature of criminal deviation, theories of causations, processes of criminal justice, penal and correctional methods and institutions. Three credit hours.

SOCI 3337 Juvenile Delinquency
Prerequisite: SOCI 2300. Juvenile delinquent behavior, problems, theory, cause, control, and prevention. Three credit hours.

SOCI 3340 Experiences of Black Americans
Prerequisite: SOCI 2300. The experiences of blacks in America are subdivided into significant periods with corresponding motifs. Attempts will be made to conceptualize the major influences from each motif-period in the struggle of blacks for sociopolitical and economic equality in a dominantly white society. Three credit hours.

SOCI 3341 Urban Sociology
Prerequisite: SOCI 2300. Analysis of elements of change in cities and suburbs in contemporary society. Social problems related to urbanization and urban centers. Three credit hours.

SOCI 3343 Social Stratification
Prerequisite: SOCI 2300. Analysis of selected theories of stratification, various lifestyles, other bases of social differentiation, and their consequences for individuals and society. Three credit hours.

SOCI 3346 Sociology of the Family
Prerequisite: SOCI 2300. The family as a major unifying force for the individual, the community, and the total society, with emphasis on parental and marital dynamics; analysis of the changes associated with the emergence of urban industrial societies. Three credit hours.

SOCI 3350 Family Violence
A consideration of abuse, neglect, and conflict within the family. Review of basic theories of interpersonal violence and conflict resolution. Focus on abuse of children, siblings, spouses, and elders. Discussion of social policy responses and appropriate interventions. Three credit hours.

SOCI 3370 The Sociology of Mental Health
The cultural, social, and social-psychological aspects of mental health. Examination of issues such as who is normal, how one is declared abnormal, theories of mental health and illness, and various modes of treatment. Three credit hours.

SOCI 3376 Sociology of Health and Illness
Prerequisite: SOCI 2300. Sociological theory and research related to social epidemiology and to the organization of efforts to cope with illness and disease. Three credit hours.

SOCI 3381 Social Statistics
Prerequisite: SOCI 2300. Recommended: MATH 1301 or equivalent. Basic statistical techniques and their corresponding theoretical premises, which are often used in statistical reasoning in sociology. Qualitative variables, characteristics of attributes, measures of their variation, correlation, and tests of significance are stressed. Three credit hours.

SOCI 3383 Classical Sociological Theory
Prerequisite: SOCI 2300. The conceptual and historical framework of classical sociological theories will be considered. Special emphases will be given to pre-twentieth-century theory and the philosophical underpinnings of sociological theory. Three credit hours.

SOCI 3384 Contemporary Sociological Theory
Prerequisite: SOCI 2300. Introduction to and critical examination of contemporary sociological theory. The course offers an overview of the concepts, methods, and theoretical perspectives employed by contemporary sociologists. Students are encouraged to take this course after completing SOCI 3383. Three credit hours.

SOCI 3385 Research Methods
Prerequisite: SOCI 2300. Recommended: MATH 1301 or equivalent. Methods of research in sociology; trends in methodology and use of computers in processing data and presentation of research reports. Three credit hours.

SOCI 3392 Environmental Sociology
Prerequisite: SOCI 2300. The environment viewed from a sociological perspective. The environmental movement and issues, such as the transition to an ecologically sound society, as they relate to the social structure of United States society. Three credit hours.

SOCI 4320 Sociocultural Change
See ANTH 4320.

SOCI 4321 Religion, Society, and Culture
See ANTH 4321.

SOCI 4328 Sociology Field Experience
Prerequisites: SOCI 2300, senior standing, or consent of chairperson. Practical experience consisting of at least 90 hours of supervised work in a community agency or any other context of sociological interest. The objective is for students to apply theoretical orientations to real world situations and to develop working skills. May be repeated one time. Three credit hours.

SOCI 4330 Political Sociology
Prerequisite: SOCI 2300. The sociological study of the United States political economy. Sociological theories and concepts applied to the analysis of various aspects of political theory and behavior. Three credit hours.

SOCI 4332 Population Analysis
Prerequisite: SOCI 2300. Population growth; description of population dynamics; analysis of economic, social and political, and ecological implications of population growth or decrease. Three credit hours.

SOCI 4353 The Sociology of Developing Nations
Prerequisite: SOCI 2300. A study of the socioeconomic characteristics of third world nations with emphasis on the sociocultural values and dynamics relevant to economic development theories and programs. Three credit hours.

SOCI 4365 Sociology of Organizations
Prerequisite: SOCI 2300. Examination of a variety of complex organizations in modern society: schools, hospitals, corporations, unions, universities, and government. Organizational structures and processes are analyzed with emphasis on inter-organizational and organization-environment relations. Three credit hours.

SOCI 4387 Seminar in Applied Sociology
Prerequisites: SOCI 2300, 3381, 3383 or 3384, 3385, and senior standing. The use of sociological theories and methods to address issues of practical concern to clients; clinical practice, policy analysis, consultation to business and government, and applied social research. Three credit hours.
SOCI 4190, 4290, 4390 Independent Study
Prerequisites: SOCI 2300, 3181, 3381, 3383 or 3384, 3385, 3185 or 15 hours in departmental courses, senior standing, or consent of chairperson. Advanced assignments in selected areas. One, two, or three credit hours.

SOCI 4393 Sociology Internship in the SNRC
Prerequisite: declared major. 60 hours of course work completed, consent of the department chairperson and director of the Sequoyah National Research Center (SNRC). Students will work under the direction of the directors of the SNRC in areas.

SOCI 4195, 4295, 4395 Special Topics
Topics vary. One, two or three credit hours.

Courses in Anthropology

ANTH 1415 Physical Anthropology
A hands-on examination of the study of past and present human and nonhuman primates as biological organisms. Topics include human genetics, variation and osteology, nonhuman primate taxonomy and behavior, forensic anthropology and the human fossil record. Three hours lecture, two hours laboratory per week. Four credit hours.

ANTH 2301 World Cultures
See INTS 2301.

ANTH 2316 Cultural Anthropology
Prerequisite: RHET 1311 recommended. Examines the concept of culture, cultural processes, and anthropological theories. Topics include subsistence strategies, politics, religion, gender, ethnicity, economics, marriage, stratification, and socialization. Case studies from both small-scale and large-scale societies. Required for majors. Three credit hours.

ANTH 3312 North American Indians
Prerequisite: ANTH 2316. A study of Indian cultures from the Arctic to northern Mexico from immediately after European contact to the present. Three credit hours.

ANTH 3313 Archaeology
Examination of the archaeological record from the Paleolithic to the Neolithic and the emergence of civilization in both the Old and New Worlds. Required for majors. Three credit hours.

ANTH 3318 Sexuality, Society, and Culture
This course provides a social scientific examination of the nature of sexuality cross-culturally as well as in Western society. Examines sexuality in a broader socio-cultural context and cultural construction used from prehistoric to post-modern eras as a form of reproduction and a means for deep expression of intimacy with others and as a device for the domination and exploitation of people of various social categories. Three credit hours.

ANTH 3319 Cultures of the Middle East
The anthropological study of Middle Eastern culture and society; covers the political conflicts and cultural adaptations in the region. The course also focuses on ethnic differentiation, and the influence of Islam upon all the cultures and peoples of the Middle East. Three credit hours.

ANTH 3378 Medical Anthropology
Prerequisite: ANTH 1415 or 2316. Comparison of non-Western and Western medical systems, definitions of health and disease, kinds of treatment, and varieties of cures; examination of the problem of how to adapt Western medicine to the needs of diverse cultural and ethnic groups. Three credit hours.

ANTH 3381 Social Statistics (See SOCI 3381)
Recommended: MATH 1301 or equivalent. Basic statistical techniques and their corresponding theoretical premises, which are often used in statistical reasoning in sociology. Qualitative variables, characteristics of attributes, measures of their variation, correlation, and tests of significance are stressed. Three credit hours.

ANTH 3383 Human Paleontology
Prerequisite: consent of instructor. Study of the fossil evidence for human evolution and the scientific principles that apply to that study; interpretation of morphological patterns in a functional and adaptive framework; interaction of cultural and biological aspects of hominin development. Three credit hours.

ANTH 3388 Relatives and Relations: Anthropology of Kinship, Marriage, and Family
Prerequisite: ANTH 2316. Systematic treatment of marriage, descent, and alliances on a cross-cultural basis. Examination of social behavior and terminologies related to kinship systems drawn from traditional and modern societies. Three credit hours.

ANTH 4310 Urban Anthropology
Prerequisite: ANTH 2316. A survey of urbanization throughout the world, with emphasis on urban adaptation of rural migrants and the phenomenon of urbanization in emerging nations. Three credit hours.

ANTH 4316 Linguistic Anthropology
Introduction to the subfield of linguistic anthropology. Examines the impact of linguistic structure on culture, socioeconomic factors in linguistic variation, intercultural and intracultural verbal and nonverbal communication. Also examines the theories and methods of descriptive anthropological linguistics applied to non Indo-European languages and introduces the student to structural linguistic analysis. Required for majors. Three credit hours.

ANTH 4320 Sociocultural Change
Prerequisite: ANTH 2316. Sociocultural change resulting from contact of acculturation, question of acceptance and rejection, pressures toward change, the role of the individual, appraisal of anthropological information and theory in a changing world. Three credit hours.

ANTH 4321 Religion, Society, and Culture
Introduction to the role of shamans, witches, diviners, cultic and magic belief systems, function of myth, ritual, religious symbolism, meaning of spirit possession, revitalization, and ancestor worship in tribal, peasant, and modern societies. Three credit hours.

ANTH 4325 Egyptology
This course will survey the archaeology of Egyptian civilization, from the earliest settlement of the Nile River Valley through the conquest of Alexander the Great and his successors. The course will also consider the origins of the field of Egyptology as well as a number of key archaeological sites representing the lives of the elite as well as the ordinary citizens of the Nile River Valley. Three credit hours.

ANTH 4327 Anthropology Field Experience
Prerequisite: consent of instructor. Study of the fossil evidence for human evolution and the scientific principles that apply to that study; interpretation of morphological patterns in a functional and adaptive framework; interaction of cultural and biological aspects of hominin development. Three credit hours.

ANTH 4340 Applied Anthropology
Prerequisite: 15 hours of anthropology or consent of instructor. Selected topics concerning the contribution of anthropology to social services and social planning, especially in the fields of education, health care, law enforcement, and economic development. Three credit hours.

ANTH 4355 Forensic Anthropology
Prerequisite: ANTH 1415 or consent of instructor. Forensic anthropology applied to knowledge of human variation to legal matters. The primary emphasis in this course will be human skeletal variation. The theoretical basis of sex determination, age estimation and ethnic origin classification based upon skeletal characteristics will be examined. Other issues such as fire death scene investigation, interval since death, and forensic archaeology also will be addressed. This course will be offered once a year. Dual-listed in the UALR Graduate Catalog as ANTH 5355. Three credit hours.
ANTH 4155 Forensic Anthropology Laboratory
Corequisite: ANTH 4355 or prerequisite: ANTH 4355. Emphasizes hands-on experience in using anthropometric, morphological and statistical techniques employed in age and stature estimation as well as sex and race determination. Laboratory exercises also include forensic archaeology, treatment and proper handling of forensic anthropology evidence, and how to write a forensic anthropology report. Dual-listed in the UALR Graduate Catalog as ANTH 5155. One credit hour.

ANTH 4180, 4280, 4380 Independent Study
Prerequisites: ANTH 1415 or 2316, junior or senior standing, consent of chairperson. One, two, or three credit hours.

ANTH 4382 Anthropological Theory
Prerequisite: ANTH 1415 or 2316. Examines the range of theories used to describe and explain variability in sociocultural phenomena. Explores the organization of particular theories as well as issues that separate divergent theories. Major theoretical orientations to be explored include evolutionism, Marxism, Freudianism, structuralism, structural-functionalism, ethnoscientific, diffusionism, historical particularism, cultural ecology, sociobiology, and cultural materialism. Required for majors. Three credit hours.

ANTH 4390 Teaching Internship
Prerequisite: consent of instructor. Working with individual instructors, upper-level majors assist lower-level students by holding study sessions twice a week for those enrolled in ANTH 1300, 1315, or 2316 and performing other tasks determined through consultation with the instructor. Three credit hours.

ANTH 4395 Senior Seminar in Holism
Prerequisite: completion of major core. Senior capstone course. Students read and discuss current work bridging the subfields of anthropology and write essays on their understandings of selected goals for the major. Three credit hours.

ANTH 4398 Special Topics
Selected topics in anthropology. Three credit hours.

ANTH 4399 Anthropology Cooperative Learning Internship
Prerequisite: declared major, 60 hours of course work completed, consent of the department chairperson and director of cooperative education. Placement in an applied work experience in either physical or cultural anthropology or archaeology. Students will work under the direction of specialists in these areas or specialists in related areas. Credit will be awarded based on at least 200 hours of work during the semester and fulfillment of the contractual obligations agreed to by both UALR and the public/private agency where placement occurs. Three credit hours.

ANTH 4485 Ethnographic Methods
Prerequisite: ANTH 2316. Instruction and supervised practice in data gathering methods and analyses in native or ethnic settings. Lectures and discussions twice weekly. The fourth hour is reserved for field study. Data gathering methods, analysis in native or ethnic settings. Dual-listed in the UALR Graduate Catalog as ANTH 5485. Four credit hours.

ANTH 4600 Principles of Archaeological Research
Introduction to methods and theory of archaeological research, Arkansas prehistory, and public archaeology through excavation, laboratory experience, and lectures. Meets daily, off campus. Six credit hours.

Courses in Nonprofit Leadership Studies (NPLS)

NPLS 1100 Introduction to Nonprofit Professional Studies
The course provides an introduction to the nonprofit or third sector in the US with an emphasis on the historical and philosophical foundations of youth and human service organizations. Topics covered include the roles of nonprofit organizations in meeting human service needs, philanthropic structure of nonprofit organizations, importance of a mission orientation for nonprofit organizations, and possible careers in nonprofit organizations. One credit hour.

NPLS 3300 Management of Nonprofit Agencies
Prerequisites: NPLS 1100, attendance at approved NPLS workshop, or permission of the instructor. This course is an overview of nonprofit management. Topics include board and committee development, fund-raising principles and practices, human resource development and supervision, general nonprofit management, nonprofit accounting and financial management, nonprofit marketing, program planning, and risk management. It also includes at least one group project and is required for Nonprofit Leadership Studies minors. Three credit hours.

NPLS 4310 Strategic Fund Development
This course prepares students for managing volunteers in nonprofit organizations in the 21st century. It covers reasons for volunteering; strategies for fostering volunteer/staff relationships; the components of a volunteer program; processes for planning, developing, and implementing a volunteer program; and techniques for the recruitment, orientation, training, motivation, supervision, evaluation, recognition, and retention of volunteers. Three credit hours.

NPLS 4320 Volunteer Management
This course is an introduction to the organizational components, concepts, and methods of effective strategic fund development for 501(c)(3) nonprofit organizations. This includes developing the ability to evaluate elements of fundraising communications (such as internal and external cases for support), annual giving efforts, special event viability, stewardship, and an organization’s overall fundraising plan. Three credit hours.

NPLS 4301, 4302 Internship
Prerequisites: NPLS minor, senior standing, 2.0 grade point average, and permission of the instructor. The internship requires 150 hours of supervised field experience in a nonprofit organization (50 hours for each hour of credit). It is designed to allow students to further develop their selected certification competencies and may be repeated for up to six hours of credit. Three credit hours.

NPLS 4180, 4280, 4380 Independent Study
Prerequisite: consent of NPLS director. Advanced assignments in selected areas. Three credit hours.

NPLS 4390 Special Topics
Selected topics in nonprofit professional studies. Three credit hours.

NPLS 4114 Leadership and Service Practicum
Prerequisite: consent of instructor. Students gain practical leadership and service experience in association with the Nonprofit Leadership Student Association. One credit hour.
The Department of Theatre Arts and Dance is dedicated to producing students prepared to succeed in all areas of theatrical and dance endeavors according to the standards of professional consensus, and also to bring about change in the conception and practice of the art.

Consistent with the goals and vision of a liberal arts education and the mission of the university and the College, the department seeks to utilize theatre and dance in order effect a permanent change in behavior as a reflection of growth and intellectual maturity. Ultimately, students participate in studies and activities which place theatre in a broader understanding of the arts and the special role that the arts play in interpreting our history and society.

All majors and minors in the theatre and dance concentrations are required to meet with their departmental advisor prior to registration each semester.

**General Information**

**Major/Minor in Theatre Arts**

All majors in the BA in Theatre Arts must complete the Core Requirements (44 hours) and Second Language Proficiency. Students must attain a cumulative GPA of 2.6 in the three entrance courses to remain a major in Theatre Arts. Students may declare the major anytime before completing the three entrance classes; however they must attain the required GPA to finalize their acceptance. The major also requires, a total of four credit hours of stage production experience, at the rate of one credit hour per semester. This requirement may be met by stage production courses (THEA 3160, 3161, 4161 or 4162). In addition, all theatre arts majors must complete one three credit hour Senior Project from the following courses: THEA 4362, THEA 4369, or THEA 4370. All participants in theatre arts programs are expected to follow rules and regulations specified in the departmental handbook.

**Minor in Theatre Arts**

The minor program is designed to provide a broad-based offering of courses in theory, performance, and stage production for interested students. The theatre arts minor requires 19 hours including THEA 1201, 2352, 2360, 9 upper level hours in THEA of the students choice, plus a total of two credit hours of stage production experience. The stage production courses should be taken at the rate of one credit hour per semester from THEA 3160, 3161, 4161, or 4162.

**Major in Dance Performance**

The BFA in Dance Performance is a skill based pre-professional program with an emphasis on teaching dance technique. While the program is “contemporary” in emphasis it offers a full slate of courses in ballet, jazz and tap as well studies in history, kinesiology, choreography, and pedagogy.

All majors in the BFA in Dance Performance must complete the Core Requirements (44 hours). The major itself requires 83 hours beyond the university core. **Note:** Technique placement/advancement by audition and/or faculty consent only. Higher level technique classes may be substituted for lower levels in the same technique; however, the total number of semesters required in each technique remains the same.

Majors must complete six semesters each of Ballet and Modern technique including two semesters in Level III of each discipline. Majors must complete an additional two semesters in Level IV of either Ballet or Modern. Dance majors are expected to enroll in two technique classes (Ballet, Modern or Jazz) every semester.

**Minor in Dance Performance**

All minors in Dance Performance must complete a total of 21 hours including DANC 2201, DANC 3301, DANC 2241, DANC 3341, DANC 2261, DANC 3270, DANC 3311 or 3313, and 4 additional hours chosen from any of the remaining courses offered in the dance curriculum. All participants in dance performance programs are expected to follow rules and regulations specified in the departmental handbook. **Note:** Technique placement/advancement by audition and/or faculty consent only. Higher level technique classes may be substituted for lower levels in the same technique; however, the total number of semesters required in each technique remains the same.

**Bachelor of Arts in Theatre Arts**

<table>
<thead>
<tr>
<th>Core Requirements (44 hours)</th>
<th>THEA 4352 Dramatic Criticism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Language Proficiency (0-9 hours)</td>
<td>THEA 4364 Contemporary Theatre</td>
</tr>
<tr>
<td>Required Courses in Theatre (63 hours)</td>
<td>ENGL 4324 Shakespeare</td>
</tr>
<tr>
<td>THEA 1201 Theatre/Dance: A First Experience</td>
<td>or another 3000 or 4000 level course in ENGL</td>
</tr>
<tr>
<td>THEA 1310 Introduction to Theatrical Design</td>
<td>3 credit hours in DANC</td>
</tr>
<tr>
<td>THEA 2310 Costume Techniques</td>
<td>Stage Production Requirement (4 hours)</td>
</tr>
<tr>
<td>THEA 2320 Stagecraft/ Lighting Technology</td>
<td>THEA 3160 Stage Management</td>
</tr>
<tr>
<td>THEA 2352 Script Analysis</td>
<td>THEA 3161 Stage Production</td>
</tr>
<tr>
<td>THEA 2359 IT for Theatre and Dance</td>
<td>THEA 4161 Stage Production</td>
</tr>
<tr>
<td>THEA 2360 Acting I</td>
<td>THEA 4162 Stage Production</td>
</tr>
<tr>
<td>THEA 3350 Voice and Movement</td>
<td>Senior Project (3 hours)</td>
</tr>
<tr>
<td>THEA 3360 Stage Management</td>
<td>THEA 4362 Capstone</td>
</tr>
<tr>
<td>THEA 3362 Directing I</td>
<td>or THEA 4369 Performance Internship</td>
</tr>
<tr>
<td>THEA 4350 History of Theatre I</td>
<td>or THEA 4370 Design/Technical Internship</td>
</tr>
<tr>
<td>THEA 4351 History of Theatre II</td>
<td>Upper-Level Electives in Theatre (3 hours)</td>
</tr>
<tr>
<td></td>
<td>Upper-Level Open Electives (6 hours)</td>
</tr>
</tbody>
</table>
Bachelor of Fine Arts in Dance

Core Requirements (44 hours)

Required Courses in Dance (83 hours)

THEA 1201 Theatre/Dance: A First Experience
DANC 2201 Modern Dance I (2 semesters)
DANC 2241 Ballet I (2 semesters)
DANC 2261 Jazz Dance I
DANC 2281 Tap Dance I
DANC 3240 Music for Dance
DANC 3261 Jazz Dance II
DANC 3301 Modern Dance II (2 semesters)
DANC 3311 Dance History I
DANC 3312 Dance History II
DANC 3341 Ballet II (2 semesters)
DANC 3360 Dance Pedagogy
DANC 3371 Choreography I
DANC 4191 Dance Performance (3 semesters)
DANC 4301 Modern Dance III (2 semesters)
DANC 4302 Modern Dance IV (2 semesters)
or DANC 4342 Ballet IV (2 semesters)
DANC 4330 Dance Science and Kinesiology
DANC 4341 Ballet III (2 semesters)
DANC 4371 Choreography II
DANC 4372 Choreography III
DANC 4399 Senior Dance Project
THEA 2359 IT for Theatre and Dance
THEA 3380 Lighting Design
or THEA 3382 Costume Design

Courses in Theatre (THEA)

THEA 1201 Theatre/Dance
A First Experience This course is designed for individuals considering majoring in theatre or dance. It serves as an introduction to the discipline, the profession, career options, and theatre as a “way of knowing.” Moreover, the course is tied to the specific identity of the department at UALR, and the faculty at the time the course is offered. Two credit hours.

THEA 1310 Introduction to Theatrical Design
To introduce the student to the conceptualized aesthetic approaches utilized in the creation of the visual and aural world of theatre production. Through hands-on creative endeavor that utilizes critical thinking, students will investigate how costume and makeup, scenery and props, lighting, and sound amplify and underpin the collaborative vision of a play. Three credit hours.

THEA 2305 Introduction to Theatre & Dance
An exploration of the components of the creative process as related to the making of theatre and dance. The purpose of this study is to develop in students an understanding of the theatrical experience. Attendance at arts events is required. Three credit hours.

THEA 2310 Costume Techniques
An exploration of craft skills used for costume construction including work with patterns, fabric, stitching and garment execution. Three credit hours.

THEA 2320 Stagecraft/ Lighting Technology
This course will present the fundamentals of lighting technology and Stagecraft, and the equipment and methods used in both areas as it applies to theatre making. Students taking this class will practice skill sets needed in theatrical construction; including the use of power tools. Three credit hours.

THEA 2352 Script Analysis
An exploration of in-depth analysis of a play’s storyline, characters, dialogue, images, metaphors and themes. Students will read, view and analyze play scripts, learning how essential information is conveyed, how story elements are communicated through visual means, how a dramatic arc is built with cause and effect, and what makes a character credible and complex. Three credit hours.

THEA 2359 IT for Theatre and Dance
An exploration of current forms of information technology such as video editing, graphic design, presentation platforms, web design, blogging, etc. as tools for creative design in choreography and directing, and as marketing tools for career promotion. Three credit hours.

THEA 2360 Acting I
A beginning level performance course. Class exercises and projects are structured to emphasize the basic theories of acting at the core of the contemporary American theatre. Three credit hours.

THEA 3160, 3161, 4161, 4162 Stage Production
Designed to provide a laboratory experience with supervised practice in order to introduce the various positions and skills associated with theatrical production. Special emphasis is placed on the communicative processes used in collaborative production. One Credit Hour.

THEA 3350 Voice and Movement
Prerequisite: THEA 2360 or consent of instructor. Focuses on building a process for correct, healthy voice usage in theatre performance in combination with movement training. Three credit hours.

THEA 3351 Acting II
Prerequisites: THEA 2352 & THEA 2360. A performance course designed to teach what acting is and to provide a structured opportunity for the individual to become familiar in an intellectual and a hands-on manner with the craft and skills required to create and perform a character in a text oriented theatrical production. Three credit hours.

THEA 3360 Stage Management
A systematic exploration of the stage manager’s role in theatrical production ranging from communicative collaboration to the management of time, materials, and personnel in relation to pre-production, rehearsal, and “calling” a show. Three credit hours.

THEA 3362 Directing I
Prerequisites: THEA 2352 & THEA 2360. This course explores the study of interpretive styles of play direction, rehearsal techniques, audience analysis, contemporary trends and the way a director thinks. Opportunity to test principles in assigned laboratory production. Three credit hours.

THEA 3380 Lighting Design
An exploratory class in the fundamentals of lighting design introducing students to design concepts for theatre and dance through the development of creative thinking and the specific language of the medium. Three credit hours.

THEA 3381 Scenic Design
This course explores the creative making and artistry of scenic design. The student will develop the ability to perform an extrinsic interpretation of a play and then by use of skill-based experimentation create a design that supports his/her specific concept for the environment the actors will live in on stage. Three credit hours.
THEA 3382 Costume Design
The students will combine acquired knowledge of design theory and practice, acquired skills of text analysis, and acquired skills of oral and written presentation to define, develop and demonstrate a creative process that utilizes costume as visual story-telling. Three credit hours.

THEA 4140, 4240, 4340 Special Topics in Theatre Arts
Special topics for the study of plays, playwrights, theatrical periods, styles, production methods, and other topics related to the general curriculum. The content and course subtitle change each time offered. Refer to the semester class schedule for a descriptive title of the content. Dual listed in the UALR Graduate Catalog at the 5000-level. One, two, or three credit hours.

THEA 4160, 4260, 4360 Independent Study
Prerequisite: Consent of Theatre faculty. Open only to qualified students who seek to do advanced research on a topic selected in consultation with an instructor. One, two, or three credit hours.

THEA 4350 History of Theatre I
Prerequisite: Junior or Senior standing. A chronological survey of theatre history from its origins through the Baroque period. Particular emphasis paid to major periods of theatrical achievement, studying conjectural and documented styles in acting, design and production methods. This course will look at the influences of painting, sculpture, architecture and music on theatre and dance during each of the following artistic periods: Greek and Roman, Medieval, Renaissance, and Baroque. Three credit hours.

THEA 4351 History of Theatre II
Prerequisite: Junior or Senior standing. A survey of Theatre practice from Romanticism through Postmodernism. Special attention given to innovative aspects, such as surrealism and expressionism, epic theatre, the absurd movement, multi-media presentations, and environmental theatre. Influences from painting, sculpture, architecture and music will also be examined. Three credit hours.

THEA 4352 Dramatic Criticism
An introduction to critical and aesthetic theory as applied to dramatic literature and theatrical production. Emphasis on the exploration of evolving theories in the last century including semiotics, phenomenology, post-structuralism, post colonial and post modern theory, feminist, gender and performance studies. Three credit hours.

THEA 4361 Directing II
Prerequisites: THEA2352, THEA2360, & THEA3362. An advanced course dealing with the theory of directing and the development of skills introduced in the Directing I course. Students will be given opportunity to test principles in an assigned laboratory production. Three credit hours.

THEA 4362 Capstone
Prerequisites: Senior major in good standing; Faculty approval of the project proposal. This course is designed to provide students with an opportunity to integrate core and major concentration courses into an in-depth project that focuses on academic and/or creative skills. The result of the work will support a pursuit of continued education and or a professional career. The project may take the form of a creative project (performance, design, production) or a research project based on a hypothesis that can be explored by a literary survey and/or laboratory application. Three credit hours.

THEA 4364 Contemporary Theatre
This course will examine contemporary plays and musicals by employing the examination of the script, choice of costumes, scene design, choreography, music and special effects, acting and directing. Students will critique at least one contemporary theatre production from the UALR season, associated regional and local theatres. Students will work in teams to create their own contemporary theatre events. Three credit hours.

THEA 4369 Performance Internship
Prerequisites: Theatre major and consent of faculty. This course is designed to provide an internship with a professional theatre company focused on an aspect of performance (acting, directing, choreography, stage management, dramaturgy). The student will spend the majority of time on site working with and according to the company’s schedule in fulfillment of production assignments determined by the management in consultation with the department coordinator. Three credit hours.

THEA 4370 Design/Technical Internship
Prerequisites: Theatre major and consent of faculty. This course is designed to provide an internship with a professional theatre company focused on an aspect of design and technical theatre (scenic design, lighting design, costume design, properties, sound design, & technical direction). The student will spend the majority of time on site working with and according to the company’s schedule in fulfillment of production assignments determined by the management in consultation with the department coordinator. Three credit hours.

Courses in Dance

DANC 2201 Modern Dance I
A course in the basic movement techniques of contemporary dance, with emphasis on breath, alignment, coordination, and endurance. This course is repeatable for credit. Two credit hours.

DANC 2241 Ballet I
The study of basic classical ballet technique and terminology. This study will place emphasis on barre and center work to gain alignment, strength, flexibility and coordination. This course is repeatable for credit. Two credit hours.

DANC 2261 Jazz Dance I
Basic style, technique, and rhythmic structures of jazz dance. This course is repeatable for credit. Two credit hours.

DANC 2271 Dance Improvisation
Guided exploration in the process of spontaneous movement discovery through solo and group movement experiences, leading to an expanded awareness of the individual’s infinite movement resources for performance and choreography. Repeatable for credit. Two credit hours.

DANC 2281 Tap Dance I
Basic tap dance techniques, including basic listening, rhythmic and coordination skills. This course is repeatable for credit. Two credit hours.

DANC 3240 Music for Dance
Prerequisite: Permission of instructor. Development of musical skills for dance. Study of musical elements related to dance; dance accompaniment techniques; music discovery and selection; recording/mixing techniques; and hands-on experience with percussion and other instruments. Two credit hours.

DANC 3261 Jazz Dance II
Prerequisite: Permission of instructor. Development of technical skills in jazz dance, including increased complexity of movement capabilities, with an emphasis on stylistic flexibility and performance qualities. This course is repeatable for credit. Two credit hours.

DANC 3270 Body Conditioning
A course in body conditioning, designed to give the dancer additional physical training that will complement regular dance technique courses. Specific method of body conditioning may vary by semester, and could include Pilates®, Yoga, Gyrotonic®, or other methods of body conditioning. Repeatable for credit. Two credit hours.

DANC 3281 Tap Dance II
Prerequisite: Permission of instructor. Development of technical and performance skills in tap dance, including more advanced listening, rhythmic and coordination skills. Additional emphasis on audition strategies. Repeatable for credit. Two credit hours.
DANC 3301 Modern Dance II
Prerequisite: Permission of instructor. Development of technical skills in contemporary dance, including rhythmic perception and spatial awareness, with increased emphasis on musicality and performance qualities. Repeatable for credit. Three credit hours.

DANC 3311 Dance History I
Study of the history of dance from primitive culture through the early 1900s. The primary focus is the development of dance as an art form in Western cultures, with specific emphasis on the origins and evolution of ballet. Three credit hours.

DANC 3312 Dance History II
Study of the history of dance in the 20th and 21st Centuries. The primary focus is the development of dance as an art form in Western cultures, with specific emphasis on contemporary dance and the evolution and emergence of new dance forms. Three credit hours.

DANC 3320 Labanotation
System for recording movement. An aid in clarifying understanding of movement both as performer and as choreographer. Three credit hours.

DANC 3341 Ballet II
Prerequisite: Permission of instructor. Intermediate ballet technique course. Development of technical skills in ballet, including safe and efficient alignment and expanded movement vocabulary, with increased emphasis on musicality and performance qualities. Repeatable for credit. Three credit hours.

DANC 3360 Dance Pedagogy
Prerequisite: permission of instructor. An overview of the general theories and practices of teaching dance; study of various methodologies used to teach dance techniques and creative movement. Opportunities to develop and implement lesson plans for students in workshop settings. Development of comprehensive syllabi for dance in private studios and public schools. Three credit hours.

DANC 3371 Choreography I
Prerequisite: DANC 2271 and permission of instructor. Corequisite: must be enrolled in one of the following courses: DANC 2201, DANC 3301, DANC 4301, DANC 2241, DANC 3341, or DANC 4341. Introduction to the basic elements of dance composition. Introduction to various methods of creating and manipulating original movement. Emphasis will be on short solo and group studies that explore space, time, energy, rhythm, shape, and dynamics. Three credit hours.

DANC 4100, 4200, 4300 Independent Study
Prerequisite: consent of dance faculty. An opportunity for advanced students to conduct an in-depth study in a specific area of interest or a special problem. One, two or three credit hours.

DANC 4140, 4240, 4340 Special Topics in Dance
Prerequisite: Permission of instructor. Special topics for the study of an area not offered in the regular dance curriculum. The content and course subtitle change each time offered. Refer to the semester class schedule for a descriptive title of the content. Repeatable for credit. One two, or three credit hours. Dual listed in the UALR Graduate Catalog at the 5000-level. One, two, or three credit hours.

DANC 4191, Dance Performance
Prerequisite: Permission of instructor. Study of selection of works, areas of appropriate staging, musical selections, technical aspects, audition, rehearsal, and all aspects of performance of dance. Repeatable for credit. One credit hour.

DANC 4261 Jazz Dance III
Prerequisite: Permission of instructor. Further development of skill, style, and understanding of the jazz form of dance. Repeatable for credit. Two credit hours.

DANC 4301 Modern Dance III
Prerequisite: Permission of instructor. Further development of kinesthetic, expressive, and aesthetic principles in contemporary dance at an advanced level. Increased complexity of movement capabilities, rhythmic structure, and spatial designs. Exploration of body/mind connection. Additional emphasis on aesthetic and expressive qualities for performance. Repeatable for credit. Three credit hours.

DANC 4302 Modern Dance IV
Prerequisite: Permission of instructor. Refinement of contemporaneous dance technique and performance skills at the advanced/pre-professional level. Repeatable for credit. Three credit hours.

DANC 4330 Dance Science and Kinesiology
Prerequisites: ANTH 1415 or BIOL 1401. Permission of instructor required. Study of the science of human movement as it applies to dance technique and performance. Students will gain a working knowledge of skeletal and muscular anatomy, and the ability to analyze movement for increased efficiency and effectiveness in training and performance. This course also includes an introduction to somatics and conditioning principles; and an overview of basic diet, health care, and injury prevention for dancers. Three credit hours.

DANC 4341 Ballet III
Prerequisite: Permission of instructor. Further development of kinesthetic, expressive, and aesthetic principles of ballet at an advanced level. Exploration of body/mind connection. Additional emphasis on self-expression within the ballet aesthetic. Repeatable for credit. Three credit hours.

DANC 4342 Ballet IV
Prerequisite: Permission of instructor. Refinement of ballet technique and performance skills at an advanced/pre-professional level. Repeatable for credit. Three credit hours.

DANC 4354 Dance Criticism and Concepts
This course examines dance forms, personalities, trends, and criteria for critical and appreciative viewing of the dance. Three credit hours.

DANC 4371 Choreography II
Prerequisite: DANC 3371. Corequisite: must be enrolled in one of the following courses: DANC 2201, DANC 3301, DANC 4301, DANC 4302, DANC 2241, DANC 3341, DANC 4341 or DANC 4342. Further exploration of methods to create and manipulate movement material. Solo and group studies of increased complexity, exploring spatial design, group forms, musical structures, and texture, with attention to overall compositional structure. Three credit hours.

DANC 4372 Choreography III
Prerequisite: DANC 4371. Corequisite: must be enrolled in one of the following courses: DANC 2201, DANC 3301, DANC 4301, DANC 4302, DANC 2241, DANC 3341, DANC 4341 or DANC 4342. Advanced course in dance composition, encompassing various methods of colliding, juxtaposing, and interweaving a wide range of original material to create cohesive, powerful works with solid compositional structure. Creation of complete works, culminating in a student-choreographed concert. Three credit hours.

DANC 4399 Senior Dance Project
Prerequisite: Senior standing and permission of dance faculty. Public presentation of choreography and performance, accompanied by written documentation of the project and a complete digital portfolio. The project is designed to demonstrate the student’s mastery of the skills developed during their course of study in Dance at UALR. Specific requirements and expectations for the project will be determined by the dance faculty, based on the nature of the proposed project. Required of all B.F.A. dance majors. Three credit hours.
The vision of the College of Business (COB) is to be a catalyst to advance education and economic development in the State of Arkansas. The mission of the COB is to support and encourage education and economic development through the teaching, research, and service activities of its academic branch and through research, information, training, and services provided by the Institute for Economic Advancement (IEA) and the Arkansas Small Business Development Center (ASBDC). The College continually seeks new opportunities to participate in these development activities.

The primary academic mission of the COB is to provide effective business education to the undergraduate and graduate degree-seeking students in Arkansas and to promote continued learning and career development to the state’s business and professional community. In addition, the faculty will engage in research and professional services that support education and economic development in Arkansas and advance knowledge in the academic disciplines.

Students may pursue programs of study in several fields of specialty within business. The curricula provide a foundation for entry into management, professional practice, and graduate study.
Concurrent and Transient Enrollment

The general policy is that students seeking UALR business degrees are expected to meet COB degree requirements with courses taken at UALR. Under exceptional circumstances a student may be permitted to take a course at another institution. Written permission to take a course at another institution must be obtained in advance from the major department chairperson and the College dean. Appropriate request forms may be obtained from the Office of Records and Registration.

Student Advisement and Information

The COB offers a comprehensive program of student advisement intended to help students transfer, register, and meet degree requirements. Students in University College who intend to major in a business field are advised by the department in which they intend to declare a major. Students accepted into a major in the College are advised by the faculty of the major department. Students accepted into the international business program are advised by the international business program coordinator.

Preparation for Secondary Education with Business Emphasis

Students preparing for careers in secondary education with an emphasis in business education should complete one of the majors offered by the COB before entering the master of education (MEd) in secondary education program with an emphasis in business education. Business courses required for licensure are offered by the COB. Students should consult the Department of Teacher Education in the College of Education regarding licensure requirements.

Business Studies Options for Non-business Majors

The College of Business offers options in business studies for students with majors in other colleges. These are:

- Students pursuing the Bachelor of Arts in liberal arts in the College of Arts, Humanities, and Social Sciences may choose a minor field concentration in business. Students interested in this option should contact the Department of Philosophy and Liberal Studies at (501) 569-3312.
- Academic minors are offered in each of the departments of the COB. Consult the departmental entries.

Departments within the College of Business

Department of Accounting
- Bachelor of Science in Accounting

Department of Economics and Finance
- Bachelor of Business Administration Economics
- Bachelor of Business Administration Finance

Department of Management
- Bachelor of Business Administration Management
- Bachelor of Business Administration Management Information Systems

Department of Marketing and Advertising
- Bachelor of Business Administration in Advertising/Public Relations
- Bachelor of Business Administration Marketing

International Business (Interdisciplinary)
- Bachelor of Business Administration in International Business

Course in First-Year Experience Business (BSAD)

BSAD 1300 Introduction to Business

No Prerequisites. BSAD 1300 is an introduction to business as a profession. It is designed to be team-taught by faculty from different areas of business to provide an overview of management in organizations, leadership, human resources, financial management, accounting, production, and marketing, as well as the global dimensions of business and their social responsibilities. The course includes industry visits and invited talks by business experts. The overarching goal of the course is to introduce the student to the various dimensions of business and to help them to identify areas of study that are of particular personal interest. Two hours lecture, one hour lab, three credit hours.
The mission of the Department of Accounting is to provide quality educational experiences that enable students to enter and advance within the accounting profession. In pursuit of this mission, the faculty is committed to providing effective teaching, relevant research, and academic, professional, and community service.

Educational Objectives

Graduates of our accounting programs should possess:

- Professional and technical knowledge,
- Effective communication skills,
- Analytical thinking abilities,
- Knowledge of professional and ethical standards, and
- Professional aspirations.

Requirements to sit for the CPA Exam

In the State of Arkansas, a CPA candidate must meet certain accounting and business education requirements. Students who earn a master’s degree from UALR College of Business will have met all the education requirements if they have completed at least 30 upper-level undergraduate hours or 20 graduate hours in accounting (or a combination thereof).

Students who earn a bachelor’s degree from UALR College of Business will have met the education requirements if they have completed 150 hours with at least 30 upper-level undergraduate hours or 20 graduate hours in accounting (or a combination thereof). Alternatively, students who have earned a bachelor’s degree from another institution and take classes from UALR College of Business but earn no additional degree will have met the education requirements if they have completed 150 hours with (a) at least 30 undergraduate hours or 20 graduate hours in business other than accounting (or a combination thereof) and (b) at least 30 upper-level undergraduate hours or 20 graduate hours in accounting (or a combination thereof). Further details on UALR course offerings and their application to CPA exam requirements can be found at the department’s website.

Specific and official information about the requirements to sit for the CPA Exam in Arkansas is available from the Arkansas State Board of Public Accountancy (http://www.arkansas.gov/asbpa/).

Minor in Accounting

A minor in accounting requires ACCT 2310, 2330, 3311, 3312, and two accounting electives.

Prerequisites

Students enrolling in any accounting course for which the designated prerequisite work has not been completed previously may be administratively dropped from the course.

Attempt Limit for Undergraduate Accounting

- **Policy:** Students are limited to a maximum of three attempts in each undergraduate accounting course.
- **Effective Date:** This policy will be effective starting in fall semester 2009. Attempts prior to this effective date will not be counted in the application of this policy.
- **Right of Appeal:** Students with extenuating circumstances may appeal the application of this policy to the department chair. If a waiver of the policy is granted for a particular course, the student must enroll in that class within 12 months of the date that the waiver was granted (or in the next term the course is offered if the course is not offered within the next 12 months) and successfully complete the course in that term.
- **Definitions:** An “attempt” is defined as either a full-term enrollment with a letter grade or Incomplete being posted or a partial-term enrollment that lasts beyond the drop deadline but ends with a withdrawal and a W being posted to the transcript. A “successful completion” is defined as a grade of C or greater in the course.

If a student drops, withdraws, or requests an incomplete this will not be considered a successful completion.
Required Courses for Bachelor of Science in Accounting

Core Requirements (44 hours)

Pre-business Courses (27 hours)
- MATH 1342 Business Calculus
- ACCT 2310 Principles of Accounting I
- ACCT 2330 Principles of Accounting II
- ECON 2310 Business Statistics I
- ECON 2312 Quantitative Methods
- ECON 2322 Principles of Microeconomics
- ECON 2323 Principles of Macroeconomics
- MGMT 1310 Fundamentals of Information Technology
- MKTG 2380 Legal Environment of Business

Professional Business Studies Core Courses (21 hours)
- MGMT 3380 Business Communication
- FINC 3310 Business Finance
- MGMT 3300 Organizational Behavior and Management
- MGMT 3304 Production/Operations Management
- MGMT 3305 Management Information Systems
- MGMT 4380 Business Strategy and Policy
- MKTG 2380 Legal Environment of Business

Major Requirements (30 hours)
- ACCT 3311 Intermediate Financial Accounting I
- ACCT 3312 Intermediate Financial Accounting II
- ACCT 3321 Federal Taxation I
- ACCT 3330 Intermediate Cost and Managerial Accounting I
- ACCT 3341 Accounting Information Systems
- ACCT 3361 Accounting for Governments, Not-for-Profits, and Other Financial Issues
- ACCT 4311 Accounting Issues
- ACCT 4314 Advanced Financial Accounting
- ACCT 4351 Auditing Theory and Practice I

Upper Division Accounting Elective (3 hours)

Unrestricted Electives (2 hours)

Courses in Accounting (ACCT)

ACCT 2310 Principles of Accounting I
Prerequisite: MGMT 1310 or CPSC 1370 or equivalent, and MATH 1302, each with C or greater. Introduction to the field of accounting, fundamentals of financial accounting, recording, summarizing, and reporting cycle. Principles of asset valuation and income measurement; accounting systems and internal controls. Three credit hours.

ACCT 2330 Principles of Accounting II
Prerequisite: ACCT 2310; MATH 1302; and MGMT 1310 or CPSC 1370 or equivalent. Note: A grade of C or higher is required in ACCT 2310 and ACCT 2330 to register in any higher level Accounting course. Continuation of ACCT 2310. Reporting for external investors. Management accounting and decision making. Three credit hours.

ACCT 3311 Intermediate Financial Accounting I
Prerequisites: ACCT 2310 and ACCT 2330, each with a grade of C or greater; MATH 1302; and MGMT 1310 or CPSC 1370 or equivalent. Conceptual and historical framework underlying contemporary accounting and financial reporting; form and content of financial statements; revenue recognition; present value mathematics in accounting; measuring and reporting for cash and receivables; inventories; property, plant, and equipment. Three credit hours.

ACCT 3312 Intermediate Financial Accounting II

ACCT 3321 Federal Taxation I
Prerequisite: ACCT 2310 and ACCT 2330 with C or greater or consent of the instructor. Introduction to federal income taxation, with emphasis on personal business and investment income and deductions, property transactions, and other topics related to taxation of individuals. Three credit hours.

ACCT 3330 Intermediate Cost and Managerial Accounting I
Prerequisites: ACCT 2310, ACCT 2330 and ECON 2312, each with a grade of C or greater; MATH 1302; and MGMT 1310 or CPSC 1370. Conceptual framework for managerial accounting, measurement and reporting of cost information, including historical and standard cost systems, cost behavior analysis, budgeting, variance analysis, responsibility accounting, performance measurement, and management control systems. Three credit hours.

ACCT 3341 Accounting Information Systems
Prerequisite: ACCT 2310, ACCT 2330, ACCT 3311, and ACCT 3330, each with a grade of C or greater. Review of the evolution of accounting systems from manual systems to advanced automated systems, with emphasis on processing requirements and the EDP tools used in the automation of information systems; study of the internal control needs of accounting systems, both manual and EDP; microcomputer-based projects. Three credit hours.

ACCT 3361 Accounting for Governments, Not-for-Profits, and Other Financial Issues
Prerequisite: ACCT 3311 with C or greater. Fund accounting for governmental and not-for-profit entities. Financial and budgetary control, the budgetary process in government, special accounting, and reporting problems of the public and not-for-profit sector. Three credit hours.
ACCT 3391 Cooperative Education in Accounting  
Prerequisites: ACCT 2310, ACCT 2330, and ACCT 3311, each with a grade of C or greater, but concurrent enrollment in ACCT 3311 permitted; major in Accounting; junior standing; GPA of 3.0 or higher in all work completed; consent of Department Chair prior to registration. Provides experience in an organizational setting designed to integrate accounting theory and practice. A written project, designed in consultation with the faculty member, and a minimum of 200 hours working for a participating employer during a semester are required. The exact activities and responsibilities related to the work experience must be specified in written agreements between the student, faculty member, employer, and the Office of Cooperative Education. Course is offered on a credit/no credit basis only, with credit being equivalent to C or greater performance. Three credit hours.

ACCT 4199, 4299, 4399 Independent Study  
Prerequisites: Senior standing, consent of instructor. Independent investigation under faculty supervision of topics not offered in regular courses. Two or three credit hours.

ACCT 4311 Accounting Issues  
Prerequisites: ACCT 2310, ACCT 2330, ACCT 3311, ACCT 3312, ACCT 3321, ACCT 3330, ACCT 3341, ACCT 3361, ACCT 4314, and ACCT 4351, each with a grade of C or greater. However, concurrent enrollment in ACCT 3321, ACCT 3361, ACCT 4314, and ACCT 4351 permitted. This is the capstone course for the undergraduate accounting major. Topics to be covered include career planning, professional certifications, ethical standards for accountants and emerging issues for the accounting profession. Accounting program assessment is done in this course. Three credit hours.

ACCT 4314 Advanced Financial Accounting  
Prerequisite: ACCT 3312 with C or greater. Accounting for temporary and long-term investments, business combinations, consolidated financial reporting, and international operations. Three credit hours.

ACCT 4316 International Accounting  
Prerequisite: ACCT 2310, ACCT 2330, ACCT 3311, ACCT 3312, and ACCT 4314, each with a grade of C or greater. This course examines international financial reporting developments, procedures, and standards (IFRS) with an emphasis on the convergence of US GAAP and International Financial Reporting Standards. Attention is also given to the financial reporting requirements of multinational enterprises operating in a global environment. Three credit hours.

ACCT 4322 Federal Taxation II  
Prerequisite: ACCT 3321 with C or greater. Federal income tax topics related to partnerships and partners, corporations and shareholders, trusts and estates, research methods in tax practice, survey of the unified estate and gift tax law. Dual-listed in the UALR Graduate Catalog as ACCT 5322. Three credit hours.

ACCT 4323 Research in Federal Taxation  
Prerequisite: ACCT 3321 with C or greater. Methods and tools of tax research as applied to both closed fact and controllable fact cases. Methods for locating and assessing relevant authority on specific tax questions is emphasized. Three credit hours.

ACCT 4351 Auditing Theory and Practice I  
Prerequisites: ACCT 2310, ACCT 2330, ACCT 3311, ACCT 3312, ACCT 3330, and ACCT 3341, each with C or greater. Nature, history, and social role of auditing. Fundamentals of contemporary auditing theory and practice with emphasis on collection and evaluation of audit evidence and the audit report. Introduction to operations auditing, statistical sampling, and auditing EDP systems. Three credit hours.

ACCT 4366 Federal Corporate Taxation  
Prerequisite: ACCT 3321 – ACCT 2310, ACCT 2330, ACCT 3311, ACCT 3312, ACCT 3330, ACCT 3341, and ACCT 4323, each with a grade of C or greater. However, concurrent enrollment in ACCT 4323 is permitted. Study of federal income taxation provisions affecting the formation, operation, liquidation, acquisition, and reorganization of Sub-chapter C corporations. There will be an emphasis on research and tax planning. Three credit hours.

ACCT 4381 Legal, Ethical, and Regulatory Environment for Accountants  
Prerequisite: MKTG 2380 – Legal Environment of Business (or equivalent) with C or greater. A comprehensive overview of business law and ethics topics, such as the Uniform Commercial Code, accountant’s liability, government regulation of business, agency, contracts, debtor-creditor relationships, real property, insurance, and other topics covered in the CPA exam. Dual listed in the UALR Graduate Catalog as ACCT 5381. Three credit hours.

ACCT 4392 Internship  
Prerequisites: at least 90 semester hours earned with a minimum overall grade point average of 3.00; B or higher grade in all upper-level accounting courses completed to include a minimum of twelve semester hours; consent of instructor and department chairperson. Practical experience in an organizational setting designed to integrate accounting theory and applications. A written report is required. Course is offered on a CR/NC basis only, with credit being equivalent to C or greater performance. Three credit hours.
The Economics and Finance Department in UALR’s College of Business offers both an Economics major and a Finance major, as well as minors in Economics, Finance, Personal Finance, and Real Estate.

The Economics major prepares students for careers in industry, financial services or government, and for graduate study in law, business, and economics. For more examples of career opportunities for economics majors, check out Economics for College Students.

Students majoring in Finance develop the strong analytical, problem-solving, and decision-making skills necessary for success in today’s global business environment. UALR’s Finance graduates are extremely successful on the Series 7 exam and on other professional exams necessary for a career in finance.

The Bottom Line: Average Starting Salary Offers to Inexperienced Bachelor’s Degree Recipients by Curriculum, Summer 2007.

<table>
<thead>
<tr>
<th>Baccalaureate Curriculum</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Engineering</td>
<td>$59,361</td>
</tr>
<tr>
<td>Electrical/electronics Engineering</td>
<td>$55,292</td>
</tr>
<tr>
<td>Computer Science</td>
<td>$53,396</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>$48,509</td>
</tr>
<tr>
<td>Economics</td>
<td>$48,483</td>
</tr>
<tr>
<td>Finance</td>
<td>$47,239</td>
</tr>
<tr>
<td>Accounting</td>
<td>$46,718</td>
</tr>
<tr>
<td>Business Administration/Management</td>
<td>$43,701</td>
</tr>
<tr>
<td>Chemistry</td>
<td>$41,506</td>
</tr>
<tr>
<td>Marketing</td>
<td>$40,161</td>
</tr>
<tr>
<td>Biological/Life Sciences</td>
<td>$34,953</td>
</tr>
<tr>
<td>History</td>
<td>$33,768</td>
</tr>
<tr>
<td>Sociology</td>
<td>$32,033</td>
</tr>
<tr>
<td>Psychology</td>
<td>$31,631</td>
</tr>
</tbody>
</table>

**Economics**

Theoretical and quantitative analysis are applied within the context of institutional and cultural constraints to solve economic problems in the private and public sectors.

The department offers a bachelor of business administration in economics and a minor in economics for students not majoring in the College of Business.

**Economics Educational Objectives**

- Understand, explain, and identify how markets work with respect to the determination of prices, quantities, and allocation of resources.
- Collect economic data and be able to analyze and forecast economic activity.
- List various supply and demand shocks and identify how they affect economic activity in a complete, traditional macroeconomic model.
- Understand models of economic growth.
- Understand and be able to differentiate between market structures and explain their implications for pricing, output, and efficiency issues.
- Understand and explain the theory of the firm including, but not limited to, pricing, optimal input mix, and marginal analysis.

**Minor in Economics**

The minor in economics, available to students majoring outside the COB, provides a market-oriented complement for many major fields of study. Students pursuing the economics minor must take ECON 2322, 2323, 3315, 3330, and six additional hours of approved upper-level electives in economics for a total of 18 hours.
BACHELOR OF BUSINESS ADMINISTRATION IN ECONOMICS

Core Requirements (44 hours)
Pre-business Courses (24 hours)
- MATH 1342 Business Calculus
- ACCT 2310 Principles of Accounting I
- ACCT 2330 Principles of Accounting II
- ECON 2310 Business Statistics I
- ECON 2322 Principles of Microeconomics
- ECON 2323 Principles of Macroeconomics
- MGMT 1310 Fundamentals of Information Technology
- MKTG 2380 Legal Environment of Business

Professional Business Studies Core Courses (24 hours)
- ECON 3355 Quantitative Business Analysis
- FINC 3310 Business Finance
- MGMT 3380 Business Communications
- MGMT 3300 Organizational Behavior and Management
- MGMT 3304 Production/Operations Management
- MGMT 3305 Management Information Systems
- MGMT 4380 Business Strategy and Policy
- MKTG 3350 Principles of Marketing

Economics Core Courses (9 hours)
- ECON 3315 Intermediate Microeconomic Analysis
- ECON 3330 Intermediate Macroeconomic Theory
- ECON 4350 Applied Econometrics

Electives in Economics (12 hours)

Unrestricted Electives (7 hours)

Finance

The finance curriculum provides a theoretical framework of the environment in which financial institutions operate. Individual courses deal with financial institutions, the financial management of business firms, investments, and particular institutional areas of banking, real estate, and insurance. Emphasis is on the decision making, or analytical, aspects of the subject areas.

The department offers three degree options (emphases) in the finance area.

1. Emphasis I (General Finance) provides training in business finance, financial decision making within the firm, and the financial and banking systems.
2. Emphasis II (Real Estate) provides a broad background in real estate analysis, investment, and financial decision making.
3. Emphasis III (Financial Services and Risk Management) provides training in the management of financial service firms such as banks, insurance firms, and wealth management firms. Minors are offered in finance and real estate.

To graduate, students majoring in finance must make a grade of C or greater in FINC 3310 as well as in all courses that constitute the major.

Finance Educational Objectives

Students completing the finance degree should be able to:

- Demonstrate a thorough understanding of time value of money concepts by solving representative problems. This includes calculating present values, future values, and rates of return.
- Identify and explain the role and functioning of financial markets. Students should be able to explain the determination of interest rates, the role of financial intermediaries, the impact of risk and the connections across international markets.
- Value financial assets. This involves being able to explain risk-return trade-offs, asset pricing models, market efficiency, and international valuation. The student should be exposed to modern portfolio theory and option pricing theory.
- Identify and explain the investment and financing decisions of the firm, and how these decisions affect value. Students should be exposed to estimating the cost of capital, should be able to identify factors affecting capital structure and financing alternatives (domestic and international), and be exposed to firm valuation.
- Be exposed to the ethical issues involved in finance. In particular, the student should be exposed to agency theory and its implications for financial managers. This includes exposure to fiduciary issues.

Real Estate and Financial Services Educational Objectives

Students specializing in real estate, insurance, or financial planning should:

- Be exposed to the theoretical concepts and principles of each.
- Be able to apply the principles to real problems.
- Be exposed to the professional and institutional aspects of each.

Minor in General Finance

A minor in general finance for students majoring outside the College requires ACCT 2310 and 2330, ECON 2322 and 2323, 3310 and 3350. Students should be aware that ECON 2310 (or its equivalent) is a prerequisite for FINC 3310 and that MATH 1342 (or its equivalent) is a prerequisite for ECON 2310.

Minor in Real Estate

A minor in real estate for students majoring outside the COB requires ECON 2322 and 2323, FINC 3310, 3370, 4371, and 4372. Students should be aware that ECON 2310 (or its equivalent) is a prerequisite for FINC 3310 and that MATH 1342 (or its equivalent) is a prerequisite for ECON 2310.

BACHELOR OF BUSINESS ADMINISTRATION IN FINANCE

Core Requirements (44 hours)
Pre-business Courses (24 hours)
- MATH 1342 Business Calculus
- ACCT 2310 Principles of Accounting I
- ACCT 2330 Principles of Accounting II
- ECON 2310 Business Statistics I
- ECON 2322 Principles of Microeconomics
- ECON 2323 Principles of Macroeconomics
- MGMT 1310 Fundamentals of Information Technology
- MKTG 2380 Legal Environment of Business

Professional Business Studies Core Courses (24 hours)
- ECON 3355 Quantitative Business Analysis
- FINC 3310 Business Finance
- MGMT 3380 Business Communications
- MGMT 3300 Organizational Behavior and Management
- MGMT 3304 Production/Operations Management
- MGMT 3305 Management Information Systems
- MGMT 4380 Business Strategy and Policy
- MKTG 3350 Principles of Marketing
Emphasis Areas for BBA in Finance (32 hours)

General Finance – Emphasis I

Major Requirements (24 hours)
FINC 3340 Financial Markets and Institutions
FINC 3350 Investment Analysis
FINC 4330 International Finance
or FINC 4362 Derivatives
FINC 4395 Advanced Financial Management

Four courses (two of which must be FINC courses) from:
FINC 4320 Bank Financial Management
FINC 4360 Risk Management
FINC 4363 Financing Entrepreneurial Ventures
FINC 4371 Real Estate Finance and Investment
FINC 4380 Portfolio Management
FINC 4383 Applied Equity Analysis
FINC 4396 Cooperative Education I
FINC 4399 Independent Study
ECON 3315 Intermediate Microeconomic Analysis
ECON 3320 Business Forecasting
ECON 3330 Intermediate Macroeconomic Theory
ECON 4320 International Economics
FINC 4330 International Finance
FINC 4362 Derivatives

Up to two approved ACCT courses

Unrestricted Electives (4 hours)

Real Estate – Emphasis II

Major Requirements (18 hours)
FINC 3350 Investment Analysis
FINC 3370 Real Estate
FINC 4371 Real Estate Finance and Investment
FINC 4372 Real Estate Valuation and Appraisal
MKTG 4378 Real Estate Law

One course from the following:
FINC 3330 Principles of Insurance
FINC 4377 Independent Study in Real Estate

Upper-level Electives (3 hours)

Unrestricted Electives (7 hours)

Financial Services and Risk Management – Emphasis III

Major Requirements (27 hours)
FINC 3330 Principles of Insurance
FINC 3340 Financial Markets and Institutions
FINC 3350 Investment Analysis
FINC 4360 Risk Management

Five courses (15 hours) from the following: (Note 1)
ACCT 3321 Federal Taxation
FINC 4320 Bank Financial Management
FINC 4341 Commercial Property and Liability Insurance
FINC 4362 Derivatives
FINC 4363 Financing Entrepreneurial Ventures
FINC 4364 Employee Benefits
FINC 4371 Real Estate Finance and Investments
FINC 4380 Portfolio Management
FINC 4383 Applied Equity Analysis
FINC 4396 Cooperative Education
FINC 4399 Independent Study

Unrestricted electives (1 hour)

Note 1: No more than two courses (6 hours) make be taken from ACCT 3321, FINC 4341, FINC 4396, and FINC 4399

Courses in Economics (ECON)

ECON 2301 Survey of Economics
The wants of individuals and societies are unlimited, while the resources for satisfying these wants are limited. Consequently, choices have to be made. Economics is the science of choice. Survey of Economics introduces students to the ability to use theories or models to make sense out of the real world and devise policy solutions to economic problems. Both individual and firm choices (microeconomics) and society choices (macroeconomics) are examined. The role of markets in summarizing choices and allocating resources is introduced. ECON 2301 will not satisfy the University Core Curriculum requirements if ECON 2322 and ECON 2323 are taken for graduation credit. Three credit hours.

ECON 2310 Business Statistics I
Prerequisite: MATH 1342 with grade of C or greater. An introduction to statistical methods from an economic and business perspective, including descriptive statistics, index numbers, probability theory as applied to statistical analysis, and an introduction to hypothesis testing. Three credit hours.

ECON 2311 Business Statistics II
Prerequisite: ECON 2310. An introduction to regression analysis with emphasis on underlying assumptions, violations of assumptions, and possible corrective measures. Students are required to develop and estimate a realistic regression model and interpret results. Three credit hours.

ECON 2312 Quantitative Methods
Prerequisites: MATH 1342 with grade of C or greater, and ECON 2310. An introduction to quantitative methods frequently used in business. Topics include regression analysis, decision analysis and expected values, Chi Square, sampling techniques, forecasting, linear programming, simulation, transportation problems, and queuing analysis. Students shall complete a term project. Three credit hours.

ECON 2322 Principles of Microeconomics
Prerequisite: MATH 1302. The theory of the individual firm in the economy, cost and price determination, income distribution, and welfare economics. Three credit hours.

ECON 2323 Principles of Macroeconomics
Prerequisite: MATH 1302 and ECON 2322. The monetary system, macroeconomic analysis of income, employment, price level, business fluctuations, and elements of international trade. Three credit hours.

ECON 3301 Survey of Economics
An overview of the science of economics. Basic economic laws and methods are presented followed by a survey of the two primary areas of economics: microeconomics and macroeconomics. Students will be introduced to the functioning of markets and the choice process individuals and societies are faced with while making economic decisions. Not for credit by business or economics majors. Three credit hours.

ECON 3310 Money and Banking
Prerequisite: ECON 2323. The nature and functions of money and the development of the Federal Reserve System, the role and activities of the Federal Reserve in the development of monetary policy. Three credit hours.

ECON 3314 Mathematical Economics
Prerequisites: ECON 2311 or 2312, 2322, 2323. Analysis of economic problems and theory using mathematics. Mathematical methods are used to demonstrate economic principles. Three credit hours.

ECON 3315 Intermediate Microeconomic Analysis
Prerequisites: ECON 2310, 2322, 2323. Price and production theory. Consumer demand, the supply function, market pricing, and various degrees of competition. Three credit hours.

ECON 3320 Business Forecasting
Prerequisites: ECON 2312, 2322, 2323. Business fluctuations; seasonal, cyclical, trend, and secular components; measurement of fluctuations; and methods of predicting changes in business activity. Three credit hours.
ECON 3330 Intermediate Macroeconomic Theory
Prerequisites: ECON 2322, 2323. National income analysis and its implications for public policy; its historical development and present status, including recent business cycle development. Three credit hours.

ECON 3355 Quantitative Business Analysis
Prerequisite: MGMT 1310, ECON 2310, 70% score on qualifying exam. Students will use common business software in applications covering regression analysis and econometric theory. Econometric methods will be used extensively. Students will be required to complete an independent research project involving the application of regression analysis. Dual-listed in the UALR Graduate Catalog as ECON 5350. Three credit hours.

ECON 4340 Labor Economics
Prerequisites: ECON 3315 or equivalent. Theoretical microeconomics covering the theory of distribution, general equilibrium, welfare economics, and other advanced topics. Three credit hours.

ECON 4310 History of Economic Thought
Prerequisites: ECON 2322, 2323. The development of contemporary economic theory. A study of the development of economic concepts, methods of analysis, and philosophies and their relation to contemporary theory. Three credit hours.

ECON 4320 International Economics
Prerequisites: ECON 2322, 2323. The theory and mechanics of international trade; balance of payments problems, commercial policy, and international investments. Three credit hours.

ECON 4322 Resource Economics
Prerequisites: ECON 2322 and 2323 or equivalents. Applied microeconomics concentrating on natural resources as they are used to maximize society’s total utility. Both the theoretical and actual aspects of natural resources as inputs to the production process are explored. Three credit hours.

ECON 4324 Environmental Economics
Prerequisite: junior standing. Applied microeconomics covering various aspects of environmental economics. The problems of preventing future pollution and cleaning past pollution in an economically efficient manner are explored. Economic theory, actual practice, and legal aspects of pollution are explored in the context of the trade-offs that must be considered. Three credit hours.

ECON 4330 Public Finance
Prerequisites: ECON 2322, 2323. The economic functions of government, public goods theory. Public sector decision making, financing, and consequences; public sector growth and institutions. Three credit hours.

ECON 4340 Labor Economics
Prerequisites: ECON 2322, 2323. Economics of labor as a factor in the production process; legislative aspects of labor-management relations; measurement of human capital; effects of union growth; role of organized labor in the economy. Three credit hours.

ECON 4344 Introduction to Financial Economics
Prerequisites: ECON 2323 or equivalent. Survey of capital markets and security market efficiency and introduction to portfolio theory, capital asset pricing, and agency theory. Implications for corporate financial policy decisions and financial market regulatory policy. Three credit hours.

ECON 4347 Economics of Development
Prerequisites: ECON 2322 and 2323 or equivalents. The study of how countries change their productive arrangements and change real per-capita income over time. Various development strategies are discussed. Three credit hours.

ECON 4350 Applied Econometrics
Prerequisites: ECON 2312. This course will introduce students to the skills used in empirical research including, but not limited to, data collection, model specification, regression analysis, violations of regression assumptions and corrections, indicator variables, linear restrictions tests, and limited dependent variable models. The course will focus on the intuition and application of econometric methods and statistical software will be used extensively. Students will be required to complete an independent research project involving the application of regression analysis. Dual-listed in the UALR Graduate Catalog as ECON 5350. Three credit hours.

ECON 4360 Independent Study
Prerequisites: senior standing, consent of chairperson and instructor. Research and independent investigation in areas of economic analysis, economic policy, history of economic thought, and economic development. Three credit hours.

ECON 4396 Cooperative Education I
Prerequisites: senior standing, economics major, completion of at least 9 hours of upper-level economics courses with a grade of C or greater, cumulative GPA of 2.50, and consent of department chairperson prior to registration. Designated to complement and extend the classroom learning experience through the application of theories and concepts in a professional work environment. A written project, designed in consultation with the faculty member, and a minimum of 200 hours with a participating employer during the semester are required. The exact number of weekly work hours, activities, and responsibilities are dependent upon the nature of the work experience and must be specified in written agreements between the student, faculty member, and the Office of Cooperative Education. This course is accepted as elective credit in the economics major. Three credit hours.

ECON 4397 Seminar in Economics
Prerequisites: senior standing and consent of faculty teaching course. Advanced economic topics in modular format and usually team taught. Topics will come from both the microeconomic and macroeconomic areas and may vary according to need. Three credit hours.

ECON 4398 Teaching Internship
Prerequisite: consent of department chair and the supervising faculty. Working with individual instructors, upper-level majors assist students by holding study sessions twice a week for students enrolled in ECON 2310 or ECON 3355 and performing other tasks determined through consultation with the instructor. Unrestricted elective. Three credit hours.

Courses in Finance (FINC)

FINC 2300 Personal Finance
Personal financial planning, including bank deposits, savings accounts, life insurance, property and casualty insurance, retirement accounts, investment in stocks and bonds, housing. May not be taken for credit by business majors. Three credit hours.

FINC 3310 Business Finance
Prerequisites: ECON 2310, ECON 2322, ECON 2323, ACCT 2310, ACCT 2320. (May be taken concurrently with ECON 2323 and ACCT 2330.) Business finance with emphasis on the modern corporation; methods of securing and managing assets; problems of bankruptcy, reorganizations; business combination. Three credit hours.

FINC 3330 Principles of Insurance
The phenomena of risk and risk bearing, including insurance and other methods of handling risks; introduction to the areas of property, marine, liability, disability, life insurance, and fidelity and surety bonding. Three credit hours.

FINC 3340 Financial Markets and Institutions
Prerequisite: FINC 3310 with a grade of C or greater (may be taken concurrently). Examination and analysis of financial markets, such as savings institutions, banks, insurance companies, mutual funds, pension funds, and others. Three credit hours.

FINC 3350 Investment Analysis
Prerequisite: FINC 3310 with a grade of C or greater. Alternative investment opportunities, analysis of the economy, its industries, and particular businesses to determine the most desirable use of funds in terms of the objectives of individual and institutional investment programs. Three credit hours.

FINC 3370 Real Estate
Introduction to the real estate business; relationship of real estate to the national and local economies; legal instruments, appraisals, property sales, and management. Three credit hours.

FINC 4320 Bank Financial Management
Prerequisites: FINC 3310 with a grade of C or greater, FINC 3340. Analysis and management of the asset and liability portfolio of depository financial institutions. Three credit hours.
FINC 4330 International Finance
Prerequisite: FINC 3310 with a grade of C or greater. Multinational corporate finance; practices and problems in international finance; balance of payments and exchange problems; recent developments and trends in international finance. Three credit hours.

FINC 4340 Life Insurance
Development of the human life value concept and financial consequences of economic death; types of insurers; types of life insurance and annuity contracts and their uses; premium and reserve calculations; introduction to programming for individuals, families, and institutions. Three credit hours.

FINC 4341 Commercial Property and Liability Insurance
Prerequisite: FINC 3310. Students will learn about commercial insurance coverage and how the business of insurance is conducted in practice. Topics covered include: underwriting, sales, marketing, claims adjustment, and pricing of insurance. Three credit hours.

FINC 4360 Risk Management
Prerequisite: FINC 3310 with a grade of C or higher. Introduction to the fundamentals of risk management. Scope and fundamentals of property and liability insurance; analysis of contracts, rating, underwriting, insuring, and loss adjustments and procedures. Three credit hours.

FINC 4362 Derivatives
Prerequisite: FINC 3310 with a grade of C or higher. The cash, futures, and options markets for commodities and financial instruments; analysis of commodity and financial contracts; use of derivative instruments to analyze the development, functions, and mechanics of these markets. The goal is to integrate an understanding of these markets into specific economic situations in order to improve the decision-making process. Three credit hours.

FINC 4363 Financing Entrepreneurial Ventures
Prerequisites: FINC 3310 and MGMT 3300. Financing alternatives for new and growing ventures; debt financing from investment banks, commercial banks, and SBIC, as well as equity financing from angel investors, private placements, venture capitalists, and public equity markets. Students use firm valuation methods and calculate return to investors to create a capital plan for a growing enterprise. Three credit hours.

FINC 4364 Employee Benefits
Analysis of the nature of health and social insurance; causes, extent, and economic consequences of old-age dependency, unemployment, and disability; hospitalization and medical insurance, surgical benefits, major medical coverages, disability income contracts; review of Social Security and related social insurance programs. Three credit hours.

FINC 4365 Estate Planning
Importance of and techniques for risk identification and analysis as a basis for recognition of insurance requirements; application of coverages to business and personal needs. Three credit hours.

FINC 4366 Introduction to Actuarial Science
Prerequisite: FINC 4340. Introduction to the mathematics of insurance as the basis for rate making; reserve and cash value calculations, and underwriting; importance of correct actual practices to company solvency and liquidity. Three credit hours.

FINC 4368 Professional Financial Planning
Prerequisite: FINC 3310 with a grade of C or greater, and permission of instructor. Professional financial planning is the capstone course for the financial planning track of the Insurance and Financial Services major. The course covers all the significant aspects of financial planning, including: gathering data and determining goals and constraints, analyzing current financial status, and developing and presenting a financial plan. The course will include case studies. Three credit hours.

FINC 4371 Real Estate Finance and Investment
Prerequisite: FINC 3310, or FINC 3370, or consent of instructor. Elements of mortgage financing for housing and investment property; sources of funds; application and approval; real estate investment analysis; effects of financing and income taxation upon investment returns. A term project analyzing a proposed real estate investment is required. Three credit hours.

FINC 4372 Real Estate Valuation and Appraisal
Prerequisite: FINC 3370. Principles of valuation and appraisal of housing and investment property; market, replacement, and income approaches. A term project appraising an existing income property is required. Three credit hours.

FINC 4177, 4277, 4377 Independent Study in Real Estate
Prerequisites: consent of chairperson and instructor. Supervised independent study in a real estate area of particular interest to the student. No more than six credit hours of Independent Study in Real Estate may apply toward a degree. Credit to be determined at the beginning of the semester. One, two, or three credit hours.

FINC 4380 Portfolio Management
Prerequisites: FINC 3310 with a grade of C or greater, FINC 3350. Investment risks, returns, and requirements; portfolio policies for the individual and institutional investor; functions of the stock exchange, investment bankers, and brokers. Three credit hours.

FINC 4383 Applied Equity Analysis
Prerequisite: FINC 3350 for undergraduate or FINC 7320 for graduate credit, and consent of instructor. Using modern models of equity valuation, students analyze company and industry data, estimate fair value for equities, and then present their recommendations to a panel of industry experts. Once approved, the students’ equity selections will then be implemented in the Ford Investment Trust. Students must apply to enroll in this course; check with the department for application forms and deadlines. Enrollment is limited to 15 students, no more than 5 of whom may be graduate students. Dual-listed in the UALR Graduate Catalog as FINC 5383. Three credit hours.

FINC 4395 Advanced Financial Management
Prerequisites: Senior finance major with a grade of C or greater in FINC 3310, consent of chairperson and instructor. Sophisticated techniques of financial management. Application of the body of financial theory to specific problems. Three credit hours.

FINC 4396 Cooperative Education I
Prerequisites: senior standing, finance major, completion of at least 9 hours of upper level finance courses, cumulative GPA of 2.50, and consent of department chairperson prior to registration. Designated to complement and extend the classroom learning experience through the application of theories and concepts in a professional work environment. A written project, designed in consultation with the faculty member, and a minimum of 200 hours with a participating employer during the semester are required. The exact number of weekly work hours, activities, and responsibilities depend upon the nature of the work experience and must be specified in written agreements between the student, faculty member, and the Office of Cooperative Education. This course is accepted as elective credit in the finance major. Three credit hours.

FINC 4397 Seminar in Finance
Prerequisites: senior standing and consent of faculty teaching course. Advanced finance topics offered in a modular format and usually team taught. Topics come from both the corporate and investments areas and may vary according to need. Three credit hours.

FINC 4398 Teaching Internship
Prerequisite: consent of department chair and the supervising faculty. Working with individual faculty instructors, upper-level majors assist students by holding review sessions twice a week for students enrolled in FINC 3310 and performing other supplemental teaching tasks as determined through consultation with the instructor. Unrestricted elective. Three credit hours.

FINC 4399 Independent Study
Prerequisites: senior standing, consent of chairperson and instructor. Research and independent investigation in specific areas of finance of interest to the student. Three credit hours.
The international business major uses an interdisciplinary approach to study the intricacies of the international marketplace. This major focuses on the complexities and interconnections between the world’s markets and cultures. The goal is to prepare students to be managers in the twenty-first century.

There is a foreign language emphasis and a general business emphasis within the international business major. Their respective requirements are shown below. Students accepted into the international business program are advised by the international business coordinator and faculty.

<table>
<thead>
<tr>
<th>BBA in International Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Requirements (44 hours)</td>
</tr>
<tr>
<td>Pre-Business Courses (24 hours)</td>
</tr>
<tr>
<td>MATH 1342 Business Calculus</td>
</tr>
<tr>
<td>ACCT 2310 Principles of Accounting I</td>
</tr>
<tr>
<td>ACCT 2330 Principles of Accounting II</td>
</tr>
<tr>
<td>ECON 2310 Business Statistics</td>
</tr>
<tr>
<td>ECON 2322 Principles of Microeconomics</td>
</tr>
<tr>
<td>ECON 2323 Principles of Macroeconomics</td>
</tr>
<tr>
<td>MGMT 1310 Fundamentals of Information Technology</td>
</tr>
<tr>
<td>MKTG 2380 Legal Environment of Business</td>
</tr>
<tr>
<td>Professional Business Studies Core (24 hours)</td>
</tr>
<tr>
<td>MGMT 3380 Business Communication</td>
</tr>
<tr>
<td>FINC 3310 Business Finance</td>
</tr>
<tr>
<td>MGMT 3300 Organizational Behavior</td>
</tr>
<tr>
<td>MGMT 3304 Production/Operations Management</td>
</tr>
<tr>
<td>MGMT 3305 Management Information Systems</td>
</tr>
<tr>
<td>MGMT 4380 Business Strategy and Policy</td>
</tr>
<tr>
<td>MKTG 3350 Principles of Marketing</td>
</tr>
<tr>
<td>ECON 3355 Quantitative Methods</td>
</tr>
<tr>
<td>International Business Major Requirements (15 hours)</td>
</tr>
<tr>
<td>ECON 4320 International Economics</td>
</tr>
<tr>
<td>FINC 4330 International Finance</td>
</tr>
<tr>
<td>MGMT 4377 International Business Management</td>
</tr>
<tr>
<td>MKTG 4320 International Marketing</td>
</tr>
<tr>
<td>IBUS 4316 Field Study in International Business</td>
</tr>
<tr>
<td>Emphasis Area (15 hours)</td>
</tr>
<tr>
<td>Foreign Language Emphasis</td>
</tr>
<tr>
<td>General International Business Emphasis</td>
</tr>
<tr>
<td>Unrestricted Electives (2 hours)</td>
</tr>
<tr>
<td>Foreign Language Requirement (9 hours)</td>
</tr>
<tr>
<td>French Language:</td>
</tr>
<tr>
<td>FREN 2311 Intermediate French I</td>
</tr>
<tr>
<td>FREN 2315 Conversational French</td>
</tr>
<tr>
<td>FREN 3310 Integrated Skills I</td>
</tr>
<tr>
<td>German Language:</td>
</tr>
<tr>
<td>GERM 2311 Intermediate German I</td>
</tr>
<tr>
<td>GERM 2312 Intermediate German II</td>
</tr>
<tr>
<td>GERM 3311 Advanced Composition and Conversation</td>
</tr>
<tr>
<td>Spanish Language:</td>
</tr>
<tr>
<td>SPAN 2311 Intermediate Spanish I</td>
</tr>
<tr>
<td>SPAN 2315 Intermediate Spanish II</td>
</tr>
<tr>
<td>SPAN 3311 Communications: Interpersonal</td>
</tr>
<tr>
<td>International Culture Requirement (3 hours)</td>
</tr>
<tr>
<td>(corresponding to language taken)</td>
</tr>
<tr>
<td>FREN 3334 French Culture and Civilization I</td>
</tr>
<tr>
<td>GERM 3334 German Culture and Civilization</td>
</tr>
<tr>
<td>SPAN 3334 Hispanic Culture: Peninsular</td>
</tr>
<tr>
<td>SPAN 3335 Hispanic Culture: Americas</td>
</tr>
<tr>
<td>HIST 3317 Twentieth-Century Europe</td>
</tr>
<tr>
<td>HIST 3328 Modern France</td>
</tr>
<tr>
<td>HIST 3331 Modern Germany since 1806</td>
</tr>
<tr>
<td>HIST 3372 History of Latin America: Republic Period</td>
</tr>
<tr>
<td>HIST 3375 Modern Mexican History</td>
</tr>
<tr>
<td>HIST 4378 The History of U.S.-Latin American Relations</td>
</tr>
<tr>
<td>POLS 3360 Comparative Government: Western</td>
</tr>
<tr>
<td>POLS 3370 Comparative Politics: Developing Areas</td>
</tr>
<tr>
<td>POLS 4340 International Relations</td>
</tr>
<tr>
<td>Note: Other courses as approved by coordinator</td>
</tr>
<tr>
<td>Business Electives (3 hours)</td>
</tr>
<tr>
<td>ADVT 4370 International Promotion Management and Public Relations</td>
</tr>
<tr>
<td>MKTG 4310 Marketing Research</td>
</tr>
<tr>
<td>Note: Other courses as approved by coordinator</td>
</tr>
<tr>
<td>International Culture Requirements (9 hours)</td>
</tr>
<tr>
<td>FREN 2311 Intermediate French I</td>
</tr>
<tr>
<td>GERM 2311 Intermediate German I</td>
</tr>
<tr>
<td>GERM 2312 Intermediate German II</td>
</tr>
<tr>
<td>SPAN 2311 Intermediate Spanish I</td>
</tr>
<tr>
<td>FREN 3334 French Culture and Civilization I</td>
</tr>
<tr>
<td>GERM 3334 German Culture and Civilization</td>
</tr>
<tr>
<td>SPAN 3334 Hispanic Culture: Peninsular</td>
</tr>
<tr>
<td>SPAN 3335 Hispanic Culture: Americas</td>
</tr>
<tr>
<td>HIST 3317 Twentieth-Century Europe</td>
</tr>
<tr>
<td>HIST 3328 Modern France</td>
</tr>
<tr>
<td>HIST 3331 Modern Germany since 1806</td>
</tr>
<tr>
<td>HIST 3372 History of Latin America: Republic Period</td>
</tr>
<tr>
<td>HIST 3375 Modern Mexican History</td>
</tr>
<tr>
<td>HIST 4378 The History of U.S.-Latin American Relations</td>
</tr>
<tr>
<td>POLS 3360 Comparative Government: Western</td>
</tr>
<tr>
<td>POLS 3370 Comparative Politics: Developing Areas</td>
</tr>
<tr>
<td>POLS 4340 International Relations</td>
</tr>
<tr>
<td>Note: Other courses as approved by coordinator</td>
</tr>
</tbody>
</table>

Note: Other courses as approved by coordinator.
### Majors
The department offers the following two majors as baccalaureate degree programs:

1. Management Information Systems (offered on campus as well as in an online/blended format)
2. Management

### Emphasis Areas
Within the management major are the following three emphases:

1. **General Management** (offered on campus as well as totally online)
2. **Human Resource Management** (offered on campus as well as totally online)
3. **Entrepreneurship and Small Business Management**

### Minors Available
There are also the following four minors in management are offered to students majoring in fields outside the College of Business (COB):

1. **Management Information Systems**
2. **General Management** (offered on campus as well as totally online)
3. **Human Resource Management** (offered on campus as well as totally online)
4. **Entrepreneurship and Small Business Management**

### General Information
All majors in the department are required to achieve a grade of C or greater in all courses required in their major; all majors must also complete all required minor courses with a 2.0 overall GPA; all non-business majors completing a minor within the department are required to achieve a grade of C or greater in all courses transferred to or taken at UALR in order to fulfill course requirements in the minor block of courses.

### Management Information Systems
The Management Information Systems (MIS) major develops competencies in analysis, design, development, and management of business information systems. The program emphasizes the development of computer applications in a business environment and effective use of computer resources to meet business objectives. Technical competencies coupled with a knowledge of all areas of business developed in the major (accounting, economics, finance, management, and marketing) prepares graduates for career advancement in today’s rapidly changing business environment.

### MIS Educational Objectives
Students completing the MIS degree should accomplish the following educational objectives:

- **Apply technical skills and knowledge of technologies to business issues.**
- **Demonstrate competence in applying functional business knowledge.**
- **Solve real world and/or simulated business problems.**
- **Display a global perspective and an understanding of cultural issues.**
- **Understand the importance of developing an ethical perspective and behaving ethically.**
- **Exhibit effective oral and written communication skills.**
General Management

The Management program prepares students for professional positions in management and leadership in small businesses, corporations, and government. Students gain knowledge and skills to acquire positions such as general manager, account manager, project manager/specialist, operations manager, human resource manager/specialist, employee relations manager, employee benefits specialist, and training specialist. Each of the three emphases in the major develops specialized conceptual knowledge and problem-solving techniques: General Management, Entrepreneurship and Small Business Management, and Human Resource Management.

The Entrepreneurship and Small Business Management emphasis develops conceptual and applied skills requisite to producing and managing an economically successful small business. Entrepreneurial and practical decision making skills are enhanced through experiential activities.

The Human Resource Management emphasis focuses on the development of knowledge and applied skills in managing people and solving people-related problems. Students are prepared for entry level careers in human resource management and for management roles in organizations of all sizes. Components of the program include the legal environment of employee relations; job analysis and design; employee planning, recruitment and selection; employee training and development; employee productivity improvement, compensation, and other reward systems; union-management relations; and quality of work life.

Management Educational Goals

Students completing the management degree should accomplish the following educational objectives:

- Demonstrate competence in applying functional business knowledge.
- Solve real world and/or simulated business problems.
- Display a global perspective and an understanding of cultural issues.
- Understand the importance of developing an ethical perspective and behaving ethically.
- Exhibit effective oral and written communication skills.

Bachelor of Business Administration in Management Information Systems

Core Requirements (44 hours)

Pre-business Courses (24 hours)

- MATH 1342 Business Calculus
- ACCT 2310 Principles of Accounting I
- ACCT 2330 Principles of Accounting II
- ECON 2310 Business Statistics I
- ECON 2322 Principles of Microeconomics
- ECON 2323 Principles of Macroeconomics
- MKTG 1310 Fundamentals of Information Technology
- MKTG 2380 Legal Environment of Business

Professional Business Studies Core (24 hours)

- ECON 3355 Quantitative Business Analysis
- FINC 3310 Business Finance
- MGMT 3300 Organizational Behavior and Management
- MGMT 3304 Production/Operations Management
- MGMT 3305 Management Information Systems
- MGMT 3380 Business Communication
- MGMT 4380 Business Strategy and Policy
- MKTG 3350 Principles of Marketing

Required MIS Courses (21 hours)

- MGMT 3307 Systems Development Methodologies
- MGMT 3310 Business Applications in COBOL
- MGMT 3352 Advanced Personal Computer Applications
- MGMT 4310 Network Technologies
- MGMT 4312 Object-Oriented Programming
- MGMT 4331 Management of Information Resources
- MGMT 4350 Business Database Management Systems
- MGMT 4355 Information Systems Development Project

Required Electives (6 hours)

- MGMT 4309 Seminar: Special Topics in CIS/MIS
- MGMT 4311 Security Issues and Advanced Topics in Network Technologies
- CPSC 2376 Programming II
- CPSC 1375 Programming I
- CPSC 1175 Introduction to Computer Science Laboratory

Management Information Systems (6 hours)

Not more than one of the following:

- MGMT 3320 Human Resources Management
- MGMT 3340 Applied Organizational Behavior
- MGMT 3362 Small Business Management
- MGMT 4361 New Venture Creation
- MGMT 4377 International Business Management

Unrestricted Electives (2 hours)

Bachelor of Business Administration in Management

Core Requirements (44 hours)

Pre-business Courses (24 hours)

- MATH 1342 Business Calculus
- ACCT 2310 Principles of Accounting I
- ACCT 2330 Principles of Accounting II
- ECON 2310 Business Statistics I
- ECON 2322 Principles of Microeconomics
- ECON 2323 Principles of Macroeconomics
- MKTG 1310 Fundamentals of Information Technology
- MKTG 2380 Legal Environment of Business

Professional Business Studies Core (24 hours)

- ECON 3355 Quantitative Business Analysis
- FINC 3310 Business Finance
- MGMT 3300 Organizational Behavior and Management
- MGMT 3304 Production/Operations Management
- MGMT 3305 Management Information Systems
- MGMT 3380 Business Communication
- MGMT 4380 Business Strategy and Policy
- MKTG 3350 Principles of Marketing

Emphasis Area (27 hours)

- See the following section for emphasis areas.

Emphasis Areas in Management:

General Management Emphasis

- MGMT 3320 Human Resources Management
- MGMT 3340 Applied Organizational Behavior
- MGMT 3362 Small Business Management
- MGMT 4377 International Business Management
Five courses (15 hours) from the following:
- MGMT 3306 Quality Assurance and Improvement
- MGMT 3352 Advanced Personal Computer Applications
- MGMT 4304 Production/Operations Management II
- MGMT 4341 Labor and Industrial Relations
- MGMT 4360 Compensation Management
- MGMT 4361 New Venture Creation
- MGMT 4365 Issues in Business Consulting
- MGMT 4378 Global Operations Management
- MGMT 4383 Issues in Entrepreneurship
- MGMT 4385 Special Topics in Management
- MGMT 4391 Employment Law
- IBUS 4316 Field Study in International Business
- FINC 4364 Employee Benefits

Human Resource Management Emphasis
- MGMT 3320 Human Resources Management
- MGMT 3340 Applied Organizational Behavior
- MGMT 4341 Labor and Industrial Relations
- MGMT 4360 Compensation Management
- MGMT 4391 Employment Law

Four courses (12 hours) from the following:
- FINC 4364 Employee Benefits
- MGMT 3352 Advanced Personal Computer Applications
- MGMT 4342 Negotiation and Administration of Collective Bargaining Agreements
- MGMT 4385 Special Topics in Management
- MGMT 3362 Small Business Management
- MGMT 3364 Family Business Management
- MGMT 4377 International Business Management
- SPCH 3316 Interviewing

Entrepreneurship and Small Business Management Emphasis
- MGMT 3362 Small Business Management
- MGMT 4361 New Venture Creation
- MGMT 4365 Business Consulting
- MGMT 4383 Issues in Entrepreneurship
- MKTG 4310 Marketing Research

Three courses (9 hours) from the following:
- MGMT 3320 Human Resources Management
- MGMT 3340 Applied Organizational Behavior
- MGMT 3352 Advanced Personal Computer Applications
- MGMT 3364 Family Business Management
- MGMT 4391 Employment Law

May include up to one of the following:
- ADVT 3300 Principles of Advertising
- FINC 3370 Real Estate
- FINC 4360 Risk Management
- FINC 4365 Business Insurance and Estate Planning
- MKTG 3353 Principles of Selling
- MKTG 3370 Principles of Retailing
- MKTG 3385 Consumer Analysis and Behavior
- MKTG 4370 Business-to-Business Marketing
- MKTG 4385 Marketing Management

Minors in Management
A grade of C or greater in all UALR or transfer courses is required in order to fulfill a course requirement in each of these minor blocks of courses.

Management Information Systems Minor (21 hours)
- MGMT 3305 Management Information Systems
- MGMT 3352 Advanced Personal Computer Applications
- MGMT 4331 Management of Information Resources

Four courses or (12 hours) from the following (with approval of the management department chair):
- ACCT 2310 Principles of Accounting I
- MGMT 3307 Systems Development Methodologies
- MGMT 3310 Business Applications in COBOL
- MGMT 4309 Seminar: Special Topics in CIS/MIS
- MGMT 4310 Network Technologies
- MGMT 4311 Security Issues and Advanced Topics in Network Technologies
- MGMT 4312 Object-Oriented Programming
- MGMT 4350 Business Database Management Systems
- MGMT 4355 Information Systems Development Project

Management Minor (18 hours)
- MGMT 3300 Organizational Behavior and Management
- MGMT 3320 Human Resources Management

Four courses (12 hours) from:
- ACCT 2310 Principles of Accounting I
- MGMT 3305 Management Information Systems
- MGMT 3340 Applied Organizational Behavior
- MGMT 3362 Small Business Management
- MGMT 4360 Compensation Management
- MGMT 4377 International Business Management
- MGMT 4385 Special Topics in Management
- MGMT 4391 Employment Law

Human Resource Management Minor (18 hours)
- MGMT 3300 Organizational Behavior and Management
- MGMT 3320 Human Resources Management

Four courses (12 hours) from:
- ACCT 2310 Principles of Accounting I
- MGMT 4341 Labor and Industrial Relations
- MGMT 4342 Negotiation and Administration of Collective Bargaining Agreements
- MGMT 4360 Compensation Management
- MGMT 4385 Special Topics in Management
- MGMT 4391 Employment Law

Entrepreneurship and Small Business Management Minor (18 hours)
- ACCT 1310 Introduction to Accounting and Taxation
- MGMT 3300 Organizational Behavior and Management
- MGMT 3362 Small Business Management
- MGMT 4361 New Venture Creation
- MGMT 4383 Issues in Entrepreneurship

One course (3 hours) from:
- MGMT 3320 Human Resources Management
- MGMT 3352 Advanced Personal Computer Applications
- MGMT 3364 Family Business Management
- MGMT 4365 Business Consulting
Courses in Management (MGMT)

MGMT 1300 Introduction to Business
A survey of business organization and operation, the various fields of business, basic business problems and procedures, the vocabulary of business, and the opportunities open to college graduates in business. Not open to junior and senior majors within the college. Three credit hours.

MGMT 1310 Fundamentals of Information Technology
An introduction to computer information system concepts and the components and capabilities of a computer system. Emphasis on the development of spreadsheet and word processing competencies. Three credit hours.

MGMT 2300 Supervisory Management
The supervisor and his or her relations with subordinates, superiors, colleagues, unions, and society. Emphasis on managerial aspects common to all supervisory positions, regardless of the technical specialty involved or the nature of the organization. Three credit hours.

MGMT 2320 Business Communication Skills
Basic principles of effective language usage in written business communication. Three credit hours.

MGMT 3300 Organizational Behavior and Management
Organizational theory, concepts, principles, behavior, and practices in operating an organization. Internal and external forces, planning, decision and control processes, motivation, formal and informal structure, productivity, and leadership. Three credit hours.

MGMT 3304 Production/Operations Management
Prerequisite: ECON 2312 or ECON 3355. Discussion of topics relating to creation and distribution of goods and services. Topics will be selected from quantitative techniques such as PERT/CPM, forecasting, transportation and assignment, quality control, learning curves scheduling and planning, inventory control, and modeling. Three credit hours.

MGMT 3305 Management Information Systems
Prerequisite: MGMT 1310 or equivalent. An introduction to the impact of computer-based information systems on the management of organizations with emphasis on the information systems as a tool for management of organizations. This course requires that students learn to use software and hardware to facilitate managerial decision making, planning, and control. Three credit hours.

MGMT 3306 Quality Assurance and Improvement
Prerequisite: ECON 2312 or ECON 3355. Quality control techniques, standards, and policies for production and operations environments; role of purchasing agent and engineer in specifying and insuring standards for purchased components; design and development of quality control and quality assurance systems throughout the organization. Three credit hours.

MGMT 3307 Systems Development Methodologies
Methods, tools, and techniques of system development. The system development life cycle will be studied using traditional and non-traditional methods. Development tools will be explored as well as key development techniques for system analysis and design. Three credit hours.

MGMT 3310 Business Applications in COBOL
Prerequisites: MGMT 1310 or equivalent. A beginning business computer problem-solving and programming course using the COBOL language. Three credit hours.

MGMT 3320 Human Resources Management
The principles of planning, directing, and controlling the personnel function. Emphasis on the effective implementation of a comprehensive personnel program, including the recruitment, development, evaluation, and motivation of employees. Three credit hours.

MGMT 3340 Applied Organizational Behavior
Prerequisites: MGMT 3300 or equivalent. A study and integration of basic managerial concepts and behavioral sciences as they affect people in organizations. Emphasis on environmental and inter-organizational forces that influence membership behavior. Three credit hours.

MGMT 3352 Advanced Personal Computer Applications
Prerequisites: MGMT 1310 or CPSC 1370. Software applications integrating the use of spreadsheet, word processing, graphics, and e-mail software and front-end design tools. Emphasis on installation, customization, and documentation of personal computer systems. Three credit hours.

MGMT 3362 Small Business Management
Corequisite: MGMT 3300 or consent of instructor. The operation of a successful small business including feasibility studies for expansion/growth, business plans, strategic management, marketing, financing, and human resource considerations. Three credit hours.

MGMT 3364 Family Business Management
Prerequisite: MGMT 3300. Management of family firm issues such as the interaction of family members, business objectives versus family objectives, succession planning, management development, motivation, and estate planning. Emphasis on the transition from personal management practices to professional management practices. Three credit hours.

MGMT 3380 Business Communication
Prerequisites: RHET 1312 and SPCH 1300. Theories of communication applied to internal and external business communication, including composition of letters, memos, and reports. Emphasis on interpersonal communication theory and oral communication skills for business. Three credit hours.

MGMT 3392 Cooperative Education I
Prerequisite: consent of faculty sponsor and department chair prior to enrolling in the course. Provides experience in an organizational setting designed to integrate theory and practice. Course is offered on a credit/no credit basis only, with credit being equivalent to C or greater for performance. Three credit hours.

MGMT 4100, 4300 Independent Study
Prerequisites: senior standing, management major with a minimum GPA of 3.00, consent of instructor. Individual study in the application of sound management principles to the solution of business problems. One or three credit hours.

MGMT 4304 Production/Operations Management II
Prerequisite: MGMT 3304. A continuation of topics similar to those presented in MGMT 3304. Topics chosen from simulation, waiting lines, scheduling, inventory systems, facility layout, motion and time studies, aggregate planning and modeling, as they relate to production/service organizations. Three credit hours.

MGMT 4309 Seminar: Special Topics in CIS/MIS
Topics especially relevant to Management Information Systems professionals will be offered on an elective basis. Such topics include, but are not limited to data communication, e-commerce technologies, and IS security. Three credit hours.

MGMT 4310 Network Technologies
Prerequisite: Junior standing or consent of the instructor. A study of the role of telecommunications in information resource management, with emphasis on business applications in a network environment. Principles of network design and installation, system component selection, administration, security, and control. Dual-listed in the UALR Graduate Catalog as MGMT 5310. Three credit hours.

MGMT 4311 Security Issues and Advanced Topics in Network Technologies
Prerequisites: MGMT 4310 or consent of the instructor. Advanced study of the role of telecommunications and computer networks in information resource management, with emphasis on security in network environments. Develops technical and critical thinking skills in a hands-on environment. Three credit hours.

MGMT 4312 Object-Oriented Programming
Beginning object-oriented programming course. Focuses on business problem solving and solution development. Three credit hours.

MGMT 4331 Management of Information Resources
Prerequisite: MGMT 3305 or consent of instructor. Addresses the role of information and of the chief information officer-decisional, interpersonal, and informational roles; issues regarding organizational strategy and information management addressed within three frameworks: centralized information systems, decentralized, combination; and issues concerning the operational activities within the information system. Three credit hours.
MGMT 4341 Labor and Industrial Relations
The industrial relations system and environment, including legal and economic constraints on participants in the bargaining process. Emphasis on collective bargaining as a power relationship in a conflict situation. Three credit hours.

MGMT 4342 Negotiation and Administration of Collective Bargaining Agreements
Lecture and extensive use of case studies to develop the strategy and tactics of contract negotiation, application, and interpretation. Emphasis on the grievance process and arbitration. Three credit hours.

MGMT 4350 Business Database Management Systems
Addresses the concepts and principles underlying the design and application of relational database management systems. The course provides an in-depth study of the key concepts of relational database systems. Projects, which typically are implemented using current commercial database management systems software, are used to reinforce most of the concepts. Dual-listed in the UALR Graduate Catalog as MGMT 5350. Three credit hours.

MGMT 4355 Information Systems Development Project
Prerequisite: MGMT 3307, MGMT 3312, and MGMT 4350. Emphasis on development of an information system project using structured analysis methodology and tools developed in previous MIS courses. The class forms project teams; accepts developmental assignments; and follows the systems development life cycle process to design a new system. Students are required to produce a working system. Three credit hours.

MGMT 4360 Compensation Management
Prerequisite: MGMT 3320. Administration of the total compensation program as a tool of management, including the use of job descriptions, job analysis and evaluation, and other necessary considerations in initiating and executing wage and salary administration. Three credit hours.

MGMT 4361 New Venture Creation
Prerequisites: MGMT 3362 or consent of instructor. The role of the entrepreneur in new venture development. Identifying, assessing, and developing entrepreneurial opportunities. Dual-listed in the UALR Graduate Catalog as MGMT 5361. Three credit hours.

MGMT 4363 Financing Entrepreneurial Ventures
Prerequisites: FINC 3310 and MGMT 3300. Financing alternatives for new and growing ventures; debt financing from investment banks, commercial banks, and SBIC, as well as equity financing from angel investors, private placements, venture capitalists, and public equity markets. Students use firm valuation methods and calculate return to investors to create a capital plan for a growing enterprise. Three credit hours.

MGMT 4365 Business Consulting
Prerequisite: MGMT 3362 or consent of instructor. Teams of students consult with local small businesses recommended by the Arkansas Small Business and Technology Development Center or other business resources. Students work on problems in accounting, production, marketing, personnel, finance, insurance, law, and information systems. Student teams write reports outlining the problems and recommended solutions. Dual-listed in the UALR Graduate Catalog as MGMT 5365. Three credit hours.

MGMT 4372 Construction Business Management
Surveys organizational and management topics from the perspectives of the construction industry. Missions, goals and objectives, strategies, and organizational structures are reviewed. Business plans are developed along with practice in using decision models. Total quality management is reviewed along with training plans. Also covered are external relations to regulation, unions, communities, suppliers, and customers. Three credit hours.

MGMT 4375 Sustainable Business
A cross-disciplinary course to introduce students to the emerging field of sustainability and its triple-bottom line focus on the social, environmental, and economic impacts of business. Dual-listed in the UALR Graduate Catalog as MGMT 5375. Three credit hours.

MGMT 4377 International Business Management
Prerequisite: MGMT 3300 or consent of the instructor. Key objectives are to define and evaluate the field of international business, to analyze the international operating context with an emphasis on the basics of cultural differences, and to discuss the management of key functional activities in firms operating in global markets. Major topics include the nature of international business; economic theory and international business operations; international systems and institutions and the analysis of key dimensions of the overseas operating environment. The management of the primary functional activities in international firms emphasized, with the focus on strategies, tactics, and structures for dealing with the special problems and challenges arising in global markets. Three credit hours.

MGMT 4378 Global Operations Management
Prerequisites: MGMT 3304 or senior standing and consent of the instructor. Focuses on managing manufacturing and service operations across national boundaries to provide an organization with a competitive advantage. Emphasis on strategic benefits of globalization through coordinated operations located in different countries and mastering both technological and social/cultural obstacles. Students analyze a series of cases that address the unique issues of global operations management. Three credit hours.

MGMT 4380 Business Strategy and Policy
Prerequisites: MGMT 1310, MGMT 3300, MGMT 3380, ECON 2312 or ECON 3355, FINC 3310, MKTG 3350, and be an officially accepted College of Business major. Integration of business concepts and techniques and their application to the development of corporate strategy and strategic planning by senior corporate executives. Includes setting objectives, developing business purposes, determining opportunities and threats, and implementing decision and control systems across functional areas. Three credit hours.

MGMT 4383 Issues in Entrepreneurship
A significant exposure to the entrepreneurial process. Interaction with real-world entrepreneurs will enhance the entrepreneurial decision-making abilities of the students. Three credit hours.

MGMT 4385 Special Topics in Management
Topics of current relevance to management professionals. Three credit hours.

MGMT 4391 Employment Law
An examination of legal problems involving employment discrimination based on race, color, religion, sex, national origin, or age. Examines the impact of developing principles of employment law on pre-employment inquiries and testing, seniority and promotions, and other personnel policies, practices, and procedures; affirmative action requirements; state and federal laws used to resolve employment discrimination claims; the procedural framework for raising and adjudicating such claims before administrative agencies and the courts; requirements of the Fair Labor Standards Act, Equal Pay Act, ERISA, Worker’s Compensation, and OSHA; and current issues such as sexual harassment and employee dismissal. Three credit hours.

MGMT 4393 Cooperative Education II
Prerequisites: MGMT 3392 and consent of instructor and department chair prior to enrolling in the course. Provides experience in an organizational setting designed to integrate theory and practice. Course is offered on a credit/no credit basis only, with credit being equivalent to C or greater performance. Three credit hours.

MGMT 4394 Internship
Prerequisites: at least 90 semester hours earned with a minimum overall grade point average of 3.0 or department approval; a minimum of 12 semester hours of upper-level management courses completed; consent of instructor and department chair. Practical experience in an organizational setting designed to integrate management theory and applications. A written report is required. Course is offered on a credit/no credit basis only, with credit being equivalent to C or greater performance. Three credit hours.
Mission

The primary mission of the department is to prepare students for a professional career in marketing, advertising, or sales in the private and public sectors. The knowledge, analytical skills, and technical expertise required of marketing professionals are emphasized. The curriculum also provides a solid foundation for students planning graduate study in marketing and business.

Marketing majors are required to achieve a grade of C or greater in all courses required of their major; all majors must complete all required pre-business and professional business courses with an overall GPA of 2.0.

General Information

Educational Objectives

Students completing the marketing degree should accomplish the following educational objectives:

- Develop an understanding of the role of marketing in the global economy and within individual organizations.
- Develop an understanding of the ethical and social responsibilities of marketers.
- Develop an understanding of the nature and methods of marketing management, including marketing organization, marketing strategy planning, the development of marketing plans and programs, and the implementation and control of marketing programs.
- Develop an understanding of the nature of the marketing environment and the process of environmental analysis.
- Develop an understanding of the nature of consumer and institutional buyer markets, including an understanding of consumer and institutional buyer behavior.
- Develop an understanding of the process of market segmentation and finding target market opportunities.
- Develop an appreciation of the value of marketing information and an understanding of the marketing research process for obtaining marketing information.
- Develop an understanding of the marketing mix variables used by marketers in decision making, including the following:
  - Product management.
  - Marketing logistics management.
  - Marketing communications and promotion management.
  - Pricing management.

Degree Requirements

Major Requirements for Degrees in the Department of Marketing and Advertising

Students will choose an emphasis in General Marketing, Advertising/Integrated Marketing Communication, or Professional Sales. The degree requirements for the degrees offered in the marketing and advertising department at UALR are outlined in the following charts.

Minors in Marketing and Advertising/Public Relations

The department offers minors in marketing, advertising, public relations, and professional selling.

A minor in marketing requires 12 hours from MKTG 3350, 3385, 4310; and Elective ADVT 3300, an IMC approach, MKTG 3353, or MKTG 4341.

A minor in advertising/public relations requires 15 hours consisting of MKTG 3350, 4310; ADVT 3300, 3310; and Elective ADVT 4320 or ADVT 3340.

A minor in professional selling requires 12 hours from the MKTG 3350, MKTG 3353, MKTG 4351, MKTG 4355. A cumulative GPA of 2.5 in all minor coursework is required.
BACHELOR OF BUSINESS ADMINISTRATION IN MARKETING

Core Requirements (44 hours)

Pre-business Courses (24 hours)
- MATH 1342 Business Calculus
- ACCT 2310 Principles of Accounting I
- ACCT 2330 Principles of Accounting II
- ECON 2310 Business Statistics I
- ECON 2322 Principles of Microeconomics
- ECON 2323 Principles of Macroeconomics
- MGMT 1310 Fundamentals of Information Technology
- MKTG 2380 Legal Environment of Business

Professional Business Studies Core (24 hours)
- ECON 3355 Quantitative Business Analysis
- FINC 3310 Business Finance
- MGMT 3300 Organizational Behavior and Management
- MGMT 3304 Production/Operations Management
- MGMT 3305 Management Information Systems
- MGMT 3380 Business Communications
- MGMT 4380 Business Strategy and Policy
- MKTG 3350 Principles of Marketing

Required Marketing Courses (15 hours)
- ADVT 3300 Principles of Advertising
- MKTG 3353 Professional Selling
- MKTG 3385 Consumer Analysis and Behavior
- MKTG 4310 Marketing Research
- MKTG 4385 Marketing Management

Required Marketing Electives (12 hours)
Select one of the following sequences:

General Marketing:
- MKTG 4370, MKTG 4341 and 6 hours of approved marketing electives, or;

Advertising/Integrated Marketing Communication:
- ADVT 3310, ADVT 3340, ADVT 4320 and 3 hours of approved advertising electives, or;

Professional Sales:
- MKTG 4351, MKTG 4355, and either MKTG 3361 or MKTG 4370, and 3 hours approved sales electives.

Unrestricted Electives (1 hours)

Courses in Marketing (MKTG)

MKTG 2380 Legal Environment of Business
Introduction to the American legal system. Provides a background of the legal environment as it pertains to profit and nonprofit organizations, along with ethical considerations and social and political influences as they affect such organizations. Three credit hours.

MKTG 3300 Business Professionalism
Principles and techniques of professionalism for the individual sales and marketing executive, and the management of professional image and conduct. Three credit hours.

MKTG 3350 Principles of Marketing
Prerequisite: junior standing. Introduction to the structure and functions of the marketing system of the economy and to marketing practices of organizations. Includes examination of the environments of marketing decision making, marketing institutions and agencies, and marketing practices of organizations. Three credit hours.

MKTG 3352 Seminar in Current Topics
Prerequisite: 54 or more credit hours. Topics of current interest and importance in marketing and advertising/public relations. Three credit hours.

MKTG 3353 Professional Selling
Prerequisite: MKTG 3350. An examination of the requirements and responsibilities of professional sales representatives, including knowledge and skill requirements, market development, preparation, effective sales communications, and customer relations. Three credit hours.

MKTG 3361 Physical Distribution
Prerequisite: MKTG 3350. Examines the marketing and cost-saving opportunities in the physical movement of goods between supplier, manufacturer, and consumer. Specific functions such as transportation, warehousing, packaging, material handling, order processing, and others will be studied and integrated into various distribution strategies. Three credit hours.

MKTG 3370 Principles of Retailing
Prerequisite: MKTG 3350. Principles of retail store management, including competition, trade area and location analysis, merchandising and inventory control, store layout, promotion, managing employees, and customer service. Three credit hours.

MKTG 3381 Advanced Business Law
Prerequisite: MKTG 2380. A comprehensive overview of business law including the law of contracts, commercial paper, bankruptcy, agency, organizations, sales, property, securities, and other topics of interest to business students and particularly to those majoring in accounting who intend to take the CPA exam. This course does not apply toward the marketing elective requirement. Three credit hours.

MKTG 3385 Consumer Analysis and Behavior
Prerequisites: PSYC 2300, MKTG 3350. An analysis of the personal, environmental, and interpersonal forces affecting consumer decisions and of their implications for marketing strategy development. Three credit hours.

MKTG 4199 Honors Seminar in Marketing
Prerequisites: senior standing, consent of department chairperson. Accelerated seminar on the latest developments in marketing strategy and marketing management, team taught by the departmental faculty. Students will prepare and present an honors paper. One credit hour.

MKTG 4310 Marketing Research
Prerequisite: MKTG 3350 or consent of instructor. A study of the development and use of information for marketing decision making; research methods applied to problems of market segmentation, pricing, distribution, promotional strategy, and development of marketing strategies. Three credit hours.

UALR Undergraduate Catalog 137
MKTG 4320 International Marketing
Prerequisite: MKTG 3350. Introduction to the major dimensions of the international marketing environment. Study of planning for and managing international marketing operations. The focus is on strategies, procedures and structures for dealing with the particular problems and challenges arising in the international marketing process. Three credit hours.

MKTG 4341 Product and Service Strategy
Prerequisite: MKTG 3350. Examines the key tasks facing brand managers, including analyzing the marketing environment and developing objectives and strategies for the product or service. Involves the day-to-day responsibilities for managing either a single product or service or a closely-related product line. Heavy emphasis on marketing mix decisions concerning pricing, product/service, promotion, and distribution strategies. Students work in brand management teams to develop a marketing plan for a product or service. Three credit hours.

MKTG 4351 Sales Management
Prerequisite: MKTG 3350 and MKTG 3353. Administration of the professional sales force. Includes recruitment, selection, training, organization, motivation, compensation, and control of sales staff. Three credit hours.

MKTG 4355 Advanced Professional Selling
Prerequisites: MKTG 3350, MKTG 3353. Advanced techniques of salesmanship, field application of selling techniques, improving communications skills. Key focus is key account selling and relationship management. Problem solving as the basis of consultative selling. Business-to-business emphasis. Three credit hours.

MKTG 4360 Purchasing
Prerequisite: MKTG 3350. Management of materials acquisition and control as it relates to the engineering, production, marketing, and finance functions of the organization. Three credit hours.

MKTG 4370 Business-to-Business Marketing
Prerequisite: MKTG 3350. Cases and concepts of marketing products from one business to another. This course includes specific strategies and techniques for the development of product policy, pricing, promotion, and distribution of business products. Three credit hours.

MKTG 4378 Real Estate Law
Prerequisite: FINC 3370. An introduction to the nature of real property; ownership rights and estates; descriptions; easements, fixtures, liens, sales, land contracts; mortgage law; deeds and property transfers; cooperatives and condominiums; wills and intestate succession; zoning; and recent developments. This course does not apply toward the marketing elective requirement. Three credit hours.

MKTG 4385 Marketing Management
Prerequisites: senior standing, MKTG 3350, MKTG 3385, MKTG 4310, ADVT 3300, MKTG 3353. The application of marketing concepts and techniques to the solution of marketing problems includes product positioning, product and product line, price, channels of distribution, advertising, and personal selling. The case study method is emphasized. Three credit hours.

MKTG 4390 Independent Study
Prerequisites: consent of instructor and department chair, minimum 3.00 GPA. Research and independent investigation in specific areas of marketing of interest to the student. Three credit hours.

MKTG 4395 Cooperative Education I
Prerequisites: senior standing, major in marketing or advertising, completion of at least nine hours of upper-level marketing or advertising courses with a grade of C or greater, cumulative GPA of 2.50, and consent of a sponsoring faculty member prior to registration. Designed to complement and extend the classroom learning experience through the application of marketing theories and concepts in a professional work environment. A written project, designed in consultation with the faculty member, and a minimum of 200 hours with a participating employer during the semester are required. The exact number of weekly work hours, activities, and responsibilities are dependent upon the nature of the work experience and must be specified in written agreements between the student, faculty member, and the Office of Cooperative Education. This course is accepted as elective credit in the marketing or advertising/public relations major. Course is offered on a credit/no credit basis only. Three credit hours.

MKTG 4396 Cooperative Education II
Prerequisites: credit for the completion of MKTG 4395 and consent of a sponsoring faculty member prior to registration. Designed as the continuation of MKTG 4395. A written project, designed in consultation with the faculty member, and a minimum of 200 hours with a participating employer during the semester are required. The exact number of weekly work hours, activities, and responsibilities are dependent upon the nature of the work experience and must be specified in written agreements between the student, faculty member, and the Office of Cooperative Education. This course is not accepted as elective credit in the marketing or advertising/public relations major. Course is offered on a credit/no credit basis only. Three credit hours.

Courses in Advertising (ADVT)

ADVT 3300 Advertising: an IMC Approach
Prerequisite: MKTG 3350. Fundamentals of local, national, and international advertising are covered, including social, ethical, and legal/regulatory aspects. Major members of the industry are discussed including advertisers, agencies, and the media. The advertising process is detailed, including research, strategic marketing planning, copyrighting, art direction, and media planning and selection. Three credit hours.

ADVT 3310 Advertising IMC Development
Prerequisite: ADVT 3300. Fundamentals of advertising from the advertiser’s perspective as an integrated element of the promotion mix are covered, including the administration of advertising campaigns, budgets, media planning, and advertising research. Three credit hours.

ADVT 3340 Public Relations
Prerequisite: ADVT 3300. History and development of public relations as an influential part of the management function is discussed, including the public relations process of fact finding, opinion research, planning, communicating, and evaluating. Decision making and application of management policy as it relates to the organization’s various publics is covered. Three credit hours.

ADVT 4320 Advertising IMC Implementation
Prerequisite: ADVT 3300. Writing advertising copy and creating visual graphics are covered, along with production techniques used in newspaper, magazine, radio, television, outdoor, direct mail, and other media. Different creative philosophies are studied, and creative consistency with the marketing strategy based on research is stressed. Three credit hours.

ADVT 4290, 4390 Independent Study
Prerequisites: prior consent of instructor, marketing or advertising/public relations major or minor with a minimum 3.00 GPA. Two or three credit hours.

Course in Professional Selling (PFSL)

PFSL 4395 Cooperative Education I
Prerequisites: MKTG 3350, MKTG 3353 with grades of C or greater, a cumulative GPA of 2.5, and consent of a sponsoring faculty member prior to registration. The application of sales concepts and techniques in a field setting. A written project, designed in consultation with the faculty member, and a minimum of 200 hours with a participating employer during the semester are required. The exact number of weekly work hours, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements between the student, faculty member, and the Office of Cooperative Education. Course is offered on a credit/no credit basis only. Three credit hours.
The College of Education (COE) provides professional course work for pre-service and in-service teachers and other personnel in related fields. Satisfactory completion of a prescribed course of study in early childhood education, or middle childhood education leads to a baccalaureate degree in education (BSE) and meets initial professional licensure requirements. The College offers a minor in secondary education for students pursuing careers as secondary teachers in the areas of art, vocal music, foreign languages, social studies, language arts, mathematics, physical science/earth science, life science/earth science, or integrated physical education and health. See Secondary Teacher Licensure for additional information.

General Information

The COE also provides course work to prepare personnel in the fields of rehabilitation of the blind, interpreting for persons who are deaf and hard of hearing, counselor education, rehabilitation counseling, reading, special education, gifted education, educational administration, adult education, and higher education at the graduate level. In addition, the college provides services to the UALR community through the Educational Renewal Zone and various educational programs for children and youth.

The college offers bachelor of science in education (BSE) degrees in early childhood, and middle childhood, and a minor in secondary education (see Secondary Teacher Licensure). A licensed teacher may add an area of endorsement (Contact Licensure Officer for specific information). An associate of science (AS) degree in American Sign Language Studies and a bachelor of arts (BA) degree in Interpretation: ASL/English are offered through the Interpreter Education Program.

At the graduate level the college offers a master of arts (MA), a master of education (MEd), an education specialist (EdS), and a doctor of education (EdD).

The college consists of several units: Departments of Teacher Education, Educational Leadership, Counseling, Adult and Rehabilitation Education, the Center for Applied Studies in Education, and the Center for Gifted Education and Advanced Placement, and the Center for Literacy.

Programs in the college which prepare educational professionals are accredited by the National Council for Accreditation of Teacher Education (NCATE) and endorsed by national specialty professional associations.

Conceptual Framework, Mission, and Goals

The mission of the College of Education is “Utilizing state of the art methodologies and technologies and demonstrating effective and reflective interactions with stakeholders, the UALR COE promotes and strengthens the professional development of individuals who, through UALR COE programs, attain specialized expertise concerning education and human resource development in diverse settings.” The COE is committed to the preparation of teachers, counselors, administrators, interpreters for the deaf, rehabilitation professionals, and professionals in higher education as lifelong learners in their respective fields of specialization. The vision of the COE is “Leaders in Learning” as demonstrated through the conceptual framework which emphasizes communication, specialized expertise, a strong commitment to diversity, and professional development.

A primary goal of the COE is to offer professional training in various educational and in related fields such as adult education, rehabilitation counseling, adult education and rehabilitation teaching.

The Interpreter Education: American Sign Language/English Program

The Interpreter Education: American Sign Language/English program prepares individuals in the field of deafness who wish to specialize in interpreting and transliterating for persons who are deaf, hard of hearing, or deaf-blind in educational, medical, mental health and other community settings. UALR provides a core curriculum program of general education and specialized instruction in American Sign Language, signed English systems, and manipulation of two languages during the interpretation process. Extensive studies in the areas of deafness; the profession of interpreting; and the deaf community and deaf culture are included in the associate of arts and bachelor of arts curriculum. Admission to the program is determined by grades of B or better in ASL I and II. Once admitted, students must achieve a Sign Communication Proficiency Interview (SCPI) score of Intermediate or above to advance from language classes to interpreting courses. Upon completion of the first interpreting series, students must achieve a Quality Assurance Screening Test (QAST) Level I/I before proceeding to upper-level interpreting courses.
The Undergraduate Teacher Education Programs

The teacher education programs prepare highly qualified individuals for careers as licensed professional educators. To accomplish this, UALR prepares teacher candidates to acquire the knowledge, dispositions and skills identified by national specialized professional associations (such as the national Middle School Association), Arkansas Standards of licensure for teachers, and NCATE (The National Council for Accreditation of Teacher Education).

- **Standard 1.** The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches, can create learning experiences that make these aspects of subject matter meaningful for students and can link the discipline(s) to other subjects.
- **Standard 2.** The teacher plans curriculum appropriate to the students, to the content, and to the course objectives.
- **Standard 3.** The teacher plans instruction based upon human growth and development, learning theory, and the needs of students.
- **Standard 4.** The teacher exhibits human relations skills which support the development of human potential.
- **Standard 5.** The teacher works collaboratively with school colleagues, parents/guardians, and the community to support student’s learning and well-being.

In addition to professional training, the college offers a variety of service and activity courses to the UALR community. Finally, the college supports service, research, and development projects in several areas through the Center for Applied Studies in Education, the Summer Laureate Program/University for Youth, the Center for Literacy, the Educational Renewal Zone, and the Center for Giftedness and Advance Placement.

In addition to the goals of the teacher education program, the faculty of the College of Education is committed to the broader goals of teaching, University and public service, and research. Because UALR is an urban institution, the college has a special responsibility to serve the central Arkansas metropolitan area. The faculty is committed to assisting in continued improvement of education through cooperation with public school officials in programs of professional growth.

Application for Admission to the BSE in Early Childhood Education

The following are minimum criteria for consideration for admission to the program. All applicants must

- be formally admitted to UALR;
- have completed RHET 1311 and 1312 English Composition, SPCH 1300, MATH 1315 or 1302 (see advisor) with a grade of C or greater in each of these courses;
- have completed all core requirements with an overall degree plan cumulative GPA of 2.65 or greater or 3.0 in the last 50 hours. Students seeking admission to the college with associate’s degrees designed for transfer (Associate of Arts, Associate of Arts in Teaching, and some Associate of Science degrees) should refer to the “Community College Transfers” information appearing later in this section.
- submit passing scores on the Praxis I (see Licensure Officer for passing scores);
- diagnose interest and motivation to work with children through past experiences (such as employment related to children or volunteer work with children). Students who would like assistance in identifying appropriate volunteer experiences should contact the Department of Teacher Education for advisement, or talk with the Office of Campus and Community Partnerships;
- contact the Undergraduate Advisor in Teacher Education, DKS 300 (501) 569-3124, to complete the admission application.

Retention

Retention decisions are the responsibility of the faculty. Once admitted, students are required to maintain a 2.65 grade point average, with at least a C in all courses specific to the early childhood program. In addition, students’ professional behaviors, content knowledge, and classroom performance will be evaluated throughout the program. Successful completion of the licensure program is not based solely on the number of course credits, but requires demonstration of specified professional knowledge, skills, and behaviors. While a student may require additional time to meet some performance expectations, the faculty may limit that time and reserves the right to remove a student from the program should appropriate progress not be demonstrated.

Application for Admission to the BSE in Middle Childhood Education

The following are minimum criteria for consideration for admission to the program:

For admission to Block I, all applicants must

- be formally admitted to UALR;
- have completed RHET 1311 and 1312 English Composition, SPCH 1300, MATH 1315 or 1302 (see advisor) with a grade of C or greater in each of these courses; and
- have completed all core requirements with an overall degree plan cumulative GPA of 2.65 or greater or 3.0 in the last 50 hours. Students seeking admission to the college with associate’s degrees designed for transfer (Associate of Arts, Associate of Arts in Teaching, and some Associate of Science degrees) should refer to the “Community College Transfers” information appearing later in this section.

For admission to Block II, all applicants must

- submit passing scores on the Praxis I (see Licensure Officer for passing scores);
- interview with program faculty; and
- contact the Undergraduate Advisor in Teacher Education, DKS 300 (501) 569-3124, to complete the admission application.

For admission to Block III, all applicants must

- satisfactorily completed all Block II requirements with an overall GPA of 2.65 or greater and
- achieve a passing scores on the Praxis II content exams.

For admission to Block II, all applicant must

- satisfactorily completed all Block III requirements with an overall GPA of 2.65 or greater and
- satisfactorily completed Internship I.

Retention

Retention decisions are the responsibility of the faculty. Once admitted, students are required to maintain a 2.65 grade point average, with at least a C in all courses specific to the middle childhood program. In addition, students’ professional behaviors, content knowledge, and classroom performance will be evaluated throughout the program. Successful completion of the licensure program is not based solely on the number of course credits, but requires demonstration of specified professional knowledge, skills, and behaviors. While a student may require additional time to meet some performance expectations, the faculty may limit that time and reserves the right to remove a student from the program should appropriate progress not be demonstrated.
Legal Requirements for Early Childhood and Middle Childhood Candidates

Students who have been formally admitted to the program must complete the following requirements before being placed in the field:

- Proof of liability insurance. This insurance is provided through the School Workers Defense Program or by joining the Student Arkansas Education Association (SAEA).
- A negative tuberculosis test. Health Card is available through the Arkansas Department of Health or at the University’s Health Center.
- Criminal records check: state civil record check and FBI record check must be completed. The student is responsible for the fees associated with these checks (See Licensure Officer, Rene Carson, for correct paperwork).

Graduation Requirements for Early Childhood and Middle Childhood Candidates

Completion of all courses on degree plan with grades as required and passing scores on all required Praxis II exams (see Licensure Officer for correct Praxis II exams to take).

Entry of all required artifacts into Chalk and Wire and submission of these artifacts for assessment in Chalk and Wire.

Submission of Graduation Application on Boss by announced deadline.

Licensure

Applicants must provide the following items to the College of Education Licensure Officer:

- A completed license application form.
- An official UALR transcript showing the date the degree was granted.
- Official transcripts from all other institutions attended.
- Appropriate Praxis II scores.
- State Police and FBI record checks.

For more information concerning licensure, contact the College of Education Licensure Officer, Dickinson Hall, Room 323.

Community College Transfers

Students transferring to UALR from two-year colleges are subject to these provisions (See “Transfer Students” section for requirements for admission of transfer students).

Students must first consult with UALR’s Academic Advising to articulate transfer coursework prior to being admitted to the College of Education.

Students must schedule an appointment with the Undergraduate Advisor in Teacher Education, DKSN 300 (501) 569-3124, to pursue admission to early childhood and middle childhood programs. Students must meet admission requirements listed above per program sought.

If a student has completed the Associate of Arts in Teaching (AAT) at a two year institution, core requirements at UALR will be met.

Students Who Transfer from Four-Year Institutions

These provisions listed for community college transfers may also apply to transfer work from four-year institutions that are either accredited by the National Council for the Accreditation of Teacher Education (NCATE) or approved as teacher education institutions by the state in which they are located.

Center for Applied Studies in Education

The Center for Applied Studies in Education (CASE) is an independent research and evaluation unit within the College of Education. The Center specializes in research involving education and human service issues. It provides research design; data collection, processing and analysis; statistical support; grant and report writing; program evaluation; and measurement procedures and instrument design services to local, state, and national agencies.

The center’s staff collaborates in research and training with UALR and UAMS faculty and students, and the Arkansas Department of Education’s Special Education Division, as well as with other state and national education and human service organizations. Current grants and contracts provide research and evaluation support to national government agencies and the state educational community. The CASE faculty participates in teaching undergraduate and graduate courses through the Department of Teacher Education.

Center for Literacy

The mission of the Center for Literacy is to use literacy as a tool for meeting the following goals:

- Prepare students to assume leadership roles for influencing literacy at local, state and national levels.
- Offer a framework for implementing learning communities within schools and regions where students can collaborate on literacy projects.
- Advocate for reading specialists, Reading Recovery teachers, and Literacy Coaches in all schools by making graduate coursework more accessible to students across the state.
- Promote research initiatives between faculty and schools.
- Provide services to the community, schools, and state to address literacy-related issues, including annual conferences, literacy academies, and summer institutes.
- Provide intellectual resources for supporting literacy efforts within schools.
- Continue to build partnerships at the national and professional levels in order to advocate for effective literacy practices, early intervention services for struggling readers, and reading specialists in all schools.
- Increase opportunities for faculty to collaborate on literacy-related projects and research.
- Publish scholarly materials, including a peer-referred online journal that focuses on school-based research, technical reports on literacy, and other documents that illustrate university and school partnerships.

The UALR Center for Literacy provides a structure for integrating five interrelated elements: teaching professional development, research and scholarly activity, technology, and partnerships. For additional information call (501) 683-7343.

Center for Gifted Education

The Center for Gifted Education, located in SUA 101, provides the following programs or services:

- AP Summer Institutes
- Arkansas Advanced Placement Professional Development Center
- Arkansas Evaluative Initiative
- Center for Gifted Education
- Duke Talent Identification Ceremony
- Summer Laureate for Youth (SLUFY)
- For additional information, call (501) 569-3410.
- Federal Title II Survey
Six components are identified in Arkansas Title II Regulations for a “well-performing institution,” UALR meets all six criteria:

1. A summary pass rate of at least 80%.
2. A content major for secondary education for those who complete the program.
3. Student/Faculty supervision ratio does not exceed 18 to 1.
4. Number of weeks of student teaching is not less than 12 weeks.
5. The institution conducts an annual comprehensive unit assessment of teacher preparation.
6. The institution is not placed on probation by NCATE.

The following institutional report is made available in compliance with section 207F of Title II regarding the performance of the teacher preparation program at UALR for the 2006-2007 cohort of students. For further information and subject specific pass rates, visit the College of Education website.

### Institutional and State Pass Rates

<table>
<thead>
<tr>
<th>Aggregate Basic Skills:</th>
<th>100% / 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Professional Knowledge:</td>
<td>100% / 100%</td>
</tr>
<tr>
<td>Aggregate Academic Content:</td>
<td>100% / 100%</td>
</tr>
<tr>
<td>Summary Totals and Pass Rate:</td>
<td>100% / 100%</td>
</tr>
</tbody>
</table>

### Departments

The following are the department within the follow and the undergraduate degrees offered:

**Department of Counseling, Adult, & Rehabilitation Education**
- Associate of Science in American Sign Language
- Bachelor of Arts in Interpretation: ASL/English

**Department of Educational Leadership**
- Upper-level courses offered, no undergraduate degree programs.

**Department of Teacher Education**
- Bachelor of Science in Education in Early Childhood Education
- Bachelor of Science in Education Middle Childhood Education

### UTeach Courses

**SCED/IGSC 1101 Inquiry Approaches to Teaching (Step 1)**
An introduction to the theory and practice necessary to design and deliver quality inquiry-based science and mathematics instruction that provides the scaffold for the early field experience. In this one hour credit course, the UALR Teach instructor or master teacher and the elementary school mentor teacher emphasize both inquiry and classroom management techniques. Step 1 invites students to explore teaching as a career. With the guidance of the instructor, in Step 1, students teach science or math lessons in upper elementary classrooms to obtain firsthand experience with planning and implementing inquiry-based curriculum. Master teachers teach Step 1, so students have direct access to accomplished teachers holding certificates who love teaching and who believe that teaching is a rewarding career choice. Local public school elementary classrooms provide the future teachers with a first taste of teaching in a supportive, diverse environment. Students shall be required to submit to a criminal background check.

**SCED/IGSC 1102 Inquiry-Based Lesson Design (Step 2)**
Prerequisite: SCED/IGSC 1101. This course (Step 2) continues the exploration of teaching careers in a middle school environment that began in SCED/IGSC 1101 (Step 1). In this one hour credit course, students observe a lesson taught by a middle school mentor teacher, and then plan and teach three inquiry-based middle school lessons with a partner. Students build on and practice lesson design skills developed in the Step 1 course while also becoming familiar with science or mathematics curricula for the middle school setting. Students demonstrate their own content knowledge in developing the lesson plans. As a result of their classroom experiences, students reflect on the observation and their teaching. At the end of the Step 2 experience, students are generally ready to make a decision about whether they want to pursue a pathway to teacher certification.
The Department of Counseling, Adult, & Rehabilitation Education (CARE) provides quality education to a heterogeneous student body at the undergraduate and graduate levels. The department is oriented to meeting the personnel needs of educational institutions and service providers in Arkansas and the nation by offering a strong emphasis on professional education with a practical application in each program. The department also provides community organizations and professional groups with services for persons who are deaf or hard of hearing, persons with visual impairments, and persons with physical disabilities.

**General Information**

The Department of CARE offers two undergraduate degrees and four graduate degrees. The undergraduate degrees are:

- An Associate of Science in American Sign Language Studies
- A Bachelor of Arts in Interpretation: ASL/English
- An academic minor in Educational Interpreting is designed for students who are majoring in Interpretation
- An academic minor in Sign Language Studies is designed for students who are not majoring in Interpretation.

**Graduate Programs**

At the graduate level, a Master of Education in counseling, a master of arts in rehabilitation counseling, a master of education in adult education, and a master of arts degree in rehabilitation for the blind are offered. The rehabilitation degree has two emphasis areas:

1. Orientation and mobility instruction for the blind
2. Rehabilitation teaching for the blind

A post-masters degree certificate in Rehabilitation Counseling is also offered through the Department of CARE. A certificate in Orientation and Mobility is offered on the master’s level. Consult the UALR Graduate Catalog for more information on the graduate programs.

**Interpreter Education, American Sign Language (ASL)/English**

The Associate of Science degree requires 60 hours and is designed to develop entry-level interpreting skills for students who are beginning careers in interpretation. The Bachelor of Arts degree requires 124 hours and is designed to develop mid- to high-level interpreting skills for students who are advancing their careers in interpretation and the field of deafness. Both programs are designed to develop the interpreting skills necessary for interpretation between individuals who are hearing and individuals who are deaf, deaf-blind, or hard of hearing, in the public and private sectors, educational institutions, business and industry, the arts, and in the community at large throughout Arkansas and the country.

Course work provides students with the knowledge of cultural diversity and interpretation skills necessary for practical application of the theories of second language learning and interpretation. The program includes:

- Instruction in American Sign Language, an English-based sign system, interpretation theory and process, the deaf community and deaf culture, and the profession of interpreting.
- Beginning and advanced interpretation and transliteration techniques with practice among American Sign Language, spoken English, and an English-based sign system, as well as techniques for interpreting for individuals who are oral, who are deaf-blind, and who are from diverse cultural backgrounds.
- Bicultural and multicultural sensitivity training and techniques for producing linguistic and cultural equivalents.
- Ninety clock hours of supervised practicum in direct communication with individuals who are deaf, deaf-blind, or hard of hearing, in the public and private sectors, educational institutions, business and industry, the arts, and in the community at large throughout Arkansas and the country.

Practicum sites in Arkansas may include, but are not limited to, the Arkansas School for the Deaf, Arkansas Rehabilitation Services, independent school districts throughout central Arkansas, Administrative Office of the Courts, the UALR community, and the community at large. Internship sites may include in-state and out-of-state placements depending on students’ abilities and/or interests.

The Interpreter Education Program maintains a sign language laboratory of instructional materials for student use. All American Sign Language and interpreting methods sections require a minimum of one hour of lab per week.

Students must attain an overall GPA of 2.00 in all work attempted at the University and attain a grade of C or greater in each of the ASL and interpretation courses. Courses in the associate of arts and the bachelor of arts degrees prepare students for the Sign Communication Proficiency Interview (SCPI), the Mid-America Quality Assurance Screening State Test (QAST), the Registry of Interpreters for the Deaf, Inc. Certification Tests (RID), and the Educational Interpreter Performance Assessment (EIPA).
Second Language Requirement for all BA and Selected Other Degrees

Nine hours of ASL or demonstration of the equivalent proficiency meets the second language requirement for students seeking BA degrees.

Credit Validation

Students who have acquired ASL skills before enrolling at UALR may apply for credit for their proficiency by taking the sequel language skill course and earning a grade of B or greater. Students must request retroactive credit from the program coordinator. Up to nine hours of credit may be obtained in this manner. Students may request a language placement test by contacting the program office at (501) 569-3169 to identify at what level the should enroll.

Admission and Exit Requirements in Interpreter Education

Students pursuing the Associate of Arts degree in Interpretation: ASL/English, must complete three (3) hours of ASL (INTR 1320 American Sign Language I), with a grade of B or greater, or demonstrate equal proficiency (see ASL Placement Test), or obtain permission from the program coordinator, Linda Stauffer, (501) 569-3169, before admission to the program. Students must make an appointment with a program advisor for advisement. To complete the AA degree program, students must attain a grade of C or greater in each of the interpretation courses, achieve an Intermediate Level on the Sign Communication Proficiency Interview (SCPI), take the state-administered Mid-America Quality Assurance Screening Test (QAST) for interpreters, and meet all other associate degree requirements. See “Associate Degree Requirement” on page 25. Required Benchmark: An SCPI Intermediate Level is required for continuation into the last semester of interpreting courses (INTR 3362, 3364, 3366, which are co-requisite courses).

Students declaring the Bachelor of Arts degree in Interpretation: ASL/English as a major must complete six (6) hours of American Sign Language courses (INTR 1320 and INTR 1321) with grades of B or greater in each course, or demonstrate equal proficiency, or obtain permission from the program coordinator for admission to the program. Students must attain an overall GPA of 2.0 in all work attempted at UALR, a grade of C or greater in each of the interpretation courses, demonstrate proficiency or complete nine (9) hours of second language requirements (ASL satisfies the language requirement), achieve an SCPI Intermediate Level, take the state-administered Mid-America Quality Assurance Screening Test (QAST) for interpreters again, and must meet all other baccalaureate degree requirements. See “Baccalaureate Degree Requirements” on page 25. Required Benchmarks: An SCPI Intermediate Level is required for continuation into the beginning interpreting courses (INTR 3362, 3364 and 3366 which are co-requisite courses) and a QAST Level I/1 is required prior for continuation into the intermediate interpreting course (INTR 3368) which has a co-requisite course, INTR 3370 (Ethical Standards and Practices for Interpreters).

Minor in Educational Interpreting

(Interpretation Majors Only)

The minor in Educational Interpreting requires 18 hours. The program is designed to provide students majoring in Interpretation with the special skills necessary for interpreting in K-12 educational settings. Required courses include INTR 3344, 3350, 3372, 4346, 4370, 4384.

Minor in Sign Language Studies

(Non-interpretation Majors Only)

The minor in Sign Language Studies requires 18 hours. The program is designed to provide a basic knowledge of American Sign Language and English-based sign language systems, the profession of interpreting, and the field of deafness. Required courses include INTR 1320, 1321, 2320, and 1340. Students must complete two additional courses from INTR 2330, 2280, 2321, 2240 or 2344. Students interested in becoming professional interpreters for persons who are deaf, deaf-blind, or hard of hearing will need additional course work beyond the requirements of this minor.

BACHELOR OF ARTS IN INTERPRETATION: ASL/ENGLISH

Core Requirements (44 hours)

Second Language Requirement (6 hours)

Major Requirements (62 hours)

Sign Language Studies (23 hours)

- INTR 1320 American Sign Language I
- INTR 1321 American Sign Language II
- INTR 1340 Deaf Culture
- INTR 2240 Special Terminology
- INTR 2320 American Sign Language III
- INTR 2321 American Sign Language IV
- INTR 3320 American Sign Language IV
- INTR 2330 Manually Coded English in Educational Settings
- INTR 2344 Comparative Linguistics
- INTR 2280 Fingerspelling

Foundation Courses (9 hours)

- INTR 3347 Introduction to Interpreting
- INTR 3380 Introduction to Interpretation Research

Interpreting Courses (23 hours)

- INTR 2240 Special Terminology
- INTR 3364 Sign to Voice Interpreting/Transliterating
- INTR 3366 Voice to Sign Interpreting/Transliterating
- INTR 4330 Interpreting I
- INTR 4332 Interpreting II
- INTR 4358 Interpreting for Deaf-Blind
- INTR 4380 Advanced Transliteration: English – English
- INTR 4382 Advanced Interpretation: ASL – English

Internship (7 hours)

- INTR 4470 Internship

Minor Courses (18 hours)

Minor in Educational Interpreting or any other academic minor offered at the University.

ASSOCIATE OF SCIENCE IN AMERICAN SIGN LANGUAGE STUDIES

Core Requirements (35 hours)

Minor Requirements (25 hours)

- INTR 1320 American Sign Language I
- INTR 1321 American Sign Language II
- INTR 2240 Special Terminology
- INTR 2320 American Sign Language III
- INTR 2321 American Sign Language IV
- INTR 2330 Manually Coded English in Educational Settings
- INTR 2280 Fingerspelling
- INTR 2240 Special Terminology
- INTR 2342 Introduction to Interpreting
- INTR 2344 Comparative Linguistics
Courses in Interpretation (INTR)

INTR 1320 American Sign Language I
A web enhanced elementary course in American Sign Language (ASL) using a natural language approach to introduce culturally appropriate signed concepts related to the immediate environment. Common communicative events and interactions are utilized to acquire a basic working vocabulary and grammar. Includes development of appropriate linguistic/cultural behaviors and awareness of/and respect for Deaf Culture. Receptive and expressive skills are fostered through interactive ASL lessons without voice. Three credit hours.

INTR 1321 American Sign Language II
Prerequisite: INTR 1320 with a grade of C or greater. An intermediate ASL course progressing from common, concrete communicative events and interactions to language usage expressing abstract ideas. Emphasis is on the comprehension and production of increasingly complex linguistic structure focusing on dialogues and conversational expressions. More complex receptive and expressive skills are fostered through interactive ASL lessons without voice. Three credit hours.

INTR 1340 Deaf Culture
An interdisciplinary study of American Deaf culture and the factors that contribute to defining the Deaf Community as a cultural minority, focusing on an awareness and understanding of cultural diversity and preservation of language. Covers the cultural identity, group norms, rules of social interaction, values, and traditions held by members who are deaf. Societal attitudes regarding deafness and issues such as cultural oppression and language power by the majority culture will be discussed, as well as the contributions of folklore, literature, plays and works of art made by persons who are deaf to the larger American culture and to their own community organizations. The impact of modern technology, emerging issues, trends, and advocacy with the Deaf Community are presented. Three credit hours.

INTR 2240 Specialized Terminology
Prerequisite: Interpretation 2320, or permission of program coordinator. Students will acquire skills and vocabulary for interpreting in specialized settings such as medical, mental health, legal, rehabilitation, counseling, technical and religious fields. Emphasis is on acquisition of specific terminology, concepts and protocol in each area. Two credit hours.

INTR 2280 Fingerspelling
Prerequisite: INTR 1320. A course designed to develop expressive and receptive fingerspelling skills. Emphasis will be on whole-word and phrase recognition, as well as on reading fingerspelling embedded in signed sentences. Expressive fingerspelling will focus on attainment of normal speed, clarity, and fluency. Extensive interaction and drills with the instructor-student(s) will enhance receptive and expressive speed and skill. Videotaped fingerspelling lessons of varying speeds embedded in sentences will be utilized for practice of receptive comprehension. Two credit hours.

INTR 2320 American Sign Language III
Prerequisite: INTR 1321 with a grade of C or greater. This course is a continuation of the Signing Naturally curriculum. Emphasis is on the development of fluent conversational skills utilizing grammatical non-manual signals and markers. Students will learn how to narrate, describe, compare, and comment. Videotaped narratives of native language users are utilized to build students' comprehension skills and to review language features taught in class. Interactive ASL lessons without voice lead to expanded vocabulary mastery and fluency. Three credit hours.

INTR 2321 American Sign Language IV
Prerequisite: INTR 2320 with a grade of C or greater. An advanced ASL performance course integrating cultural and linguistic competencies ranging from informal to formal communication events. Emphasis is on greater fluency in idiomatic language usage and mastery of vocabulary and syntax. Linguistic competence is enhanced through interactive discourse with native language users. Three credit hours.

INTR 2330 Manually Coded English in Educational Settings
Prerequisite: INTR 1321. Designed to expose students to a variety of signed English systems. Students learn the rules governing the selection of signs and the rationale for sign language systems in the educational setting. Focus is on learning Signing Exact English (SEE II) as adopted by educational systems and state schools for the deaf. Three credit hours.

INTR 2344 Comparative Linguistics: ASL and English
Prerequisite: INTR 2320, 2330. This course introduces students to the basic concepts of linguistics: phonology, morphology, syntax, and language use. Students will compare and contrast the fundamental linguistic structures of American Sign Language and English and learn to think critically about languages and language use. Three credit hours.

INTR 3320 American Sign Language V
Prerequisites: The completion of an Associate of Science in American Sign Language Studies, and an Intermediate level on the Signed Communication Proficiency Interview (SCPI). Corequisite: INTR 3344. This is an advanced ASL performance course integrating cultural and linguistic competencies ranging from informal to formal communication. Emphasis is on fluency in idiomatic language usage and mastery of vocabulary and syntax. Linguistic competence is enhanced through interactive discourse with native language users. Three credit hours.

INTR 3344 Interpretation Theory and Process
Prerequisite: INTR 2342. Corequisite: INTR 2321. This course uses a process-oriented approach to applying the essential cognitive strategies to interpretation. These strategies include organizing and manipulating visual images, analyzing message for meaning, and self-monitoring for message accuracy. The course serves as a transition from language learning to beginning interpretation from American Sign Language to English. Three credit hours.

INTR 3346 Introduction to Interpreting
Prerequisites: The completion of an Associate of Science in American Sign Language Studies. Designed to provide students with a working knowledge of the profession of interpreting, including the Code of Professional Conduct, certification criteria, the roles and responsibilities of an interpreter, and compensation. Discussions of the role of the interpreter in a variety of professional settings including educational, medical, legal, rehabilitation and mental health. Three credit hours.

INTR 3350 Artistic Interpreting in Educational Settings
Prerequisite: INTR 1321. Designed to teach students the skills needed to interpret music, prose, poetry, and drama in a visually artistic manner. Emphasizes appropriate use of conceptually accurate signs, facial expression, movement, and rhythm. Three credit hours.

INTR 3364 Sign to Voice Interpreting/Transliterating
Prerequisite: Interpretation 3320, 3344, 3346. Designed to develop skills in sign to voice interpreting for persons who are deaf. Students will learn to voice simultaneously and consecutively when viewing videotapes of native signers who use a variety of signing modalities to communicate. Audiotapes provide students with immediate feedback. Three credit hours.
INTR 3366 Voice to Sign Interpreting/Transliterating
Prerequisites: INTR 3320, INTR 3344 and INTR 3346. Designed to develop interpreting and transliterating skills through the use of interactive videotapes and audiotapes. Students will also learn to select and assess appropriate modality and language levels. Emphasis will be on the process of interpreting and developing fluency, speed, and accuracy. Three credit hours.

INTR 3372 Interpreting for Persons who are Hard of Hearing
Prerequisite: INTR 3346. A study of the mechanics of and skills needed for interpreting for persons who are deaf and hard of hearing and use assistive listening technology, oral transliterating, Cued Speech, or speech to text services. Students will develop and practice appropriate techniques necessary for interpreting for persons who are deaf and hard of hearing, who do not know sign language and who use the above methods for communication. Three credit hours.

INTR 3380 Introduction to Interpreting Research
Prerequisite: INTR 2350, INTR 2344, or permission of the program coordinator. This course is designed to introduce students to the process of conducting research, quantitative and qualitative methods of data collection and analysis, and the process of reporting research results. Students will learn ethical practices in the conduct of research. Students will critically evaluate research in the fields of sign language linguistics and spoken and sign language interpreting research. Three credit hours.

INTR 4102, 4202, 4302 Workshop
Special topics. One, two, or three credit hours.

INTR 4108, 4208, 4308 Independent Study
Prerequisite: consent of coordinator. Special topics. One, two, or three credit hours.

INTR 4330 Interpreting I
Prerequisite: The completion of INTR 3364, 3366, QAST Level 1/1 or equivalent interpreting credential. This course is an intermediate level interpreting skills course designed to enhance both linguistic competencies and interpreting skills. This course is divided into four 3-week blocks with each block focusing on a specific topic/setting. Business practices regarding self-employment and record keeping will be infused into each learning block. Students will practice specialized vocabulary, participate in simulated interpreting experiences, apply ethical decision making, tour environments and interact with professionals from targeted settings: medical, video relay/employment, social services, religious and business. Three credit hours.

INTR 4332 Interpreting II
Prerequisite: INTR 4330, INTR 4370. This course is an advanced level interpreting skills course designed to enhance both linguistic competencies and interpreting skills. This course is divided into four 3-week blocks with each block focusing on a specific topic/setting. Business practices regarding self-employment and record keeping will be infused into each learning block. Students will practice specialized vocabulary, participate in simulated interpreting experiences, apply ethical decision making, tour environments and interact with professionals from targeted settings: video relay and video remote interpreting, government agencies, mental health and legal. Three credit hours.

INTR 4346 Principles of Educational Interpreting
Prerequisite: Interpretation 3380, QAST Level 1/1 or equivalent, or permission of program coordinator. Issues related to interpreting in classrooms at the elementary, secondary, and postsecondary levels. Students will analyze the major transitions from childhood to adolescence to adulthood and the changes required in professional roles, responsibilities, and ethical decision-making. Topics will include: working with children and adolescents, their parents, and educators; sign systems used in educational settings; educational goals and language policies; certification issues; working conditions; analyzing classroom interpreting tasks; and knowledge, skills, and attitudes needed for educational interpreting. Three credit hours.

INTR 4358 Interpreting for Persons who are Deaf-Blind
Prerequisites: INTR 3364, INTR 3366, QAST 1/1 or equivalent. Students will study the major causes of deaf-blindness and the impact of deaf-blindness on communication, mobility and life styles. Emphasis is on learning and practicing the various modes of communication used by persons who are deaf-blind for interpreters and intervenors. Students will become familiar with human guide techniques and the aids and devices available to persons who are deaf-blind. Tactile forms of communication will be emphasized during role play situations. A service-learning component will provide the opportunity to apply classroom knowledge and skills in real life situations, while meeting community need. Reflective discussion and writing is emphasized throughout the course. Three credit hours.

INTR 4370 Ethical Standards for Interpreters
Prerequisites: fnTR 3364, 3366 and QAST Level 1/1, or permission of program coordinator. A course designed to teach and practice a model for ethical decision making within the field of interpretation. Students will study codes from international interpreting organizations, the NAD-RID Code of Professional Conduct, the QAST Code of Ethics, and the Arkansas Code for interpreters in the judiciary. The RID Ethical Practices System will be reviewed. Various interpreting scenarios presenting ethical dilemmas will be discussed and/or role-played applying the Humphrey/Alcorn Decision-Making Model to the NAD-RID Code of Professional Conduct. Three credit hours.

INTR 4380 Advanced Transliteration: English – English
Prerequisites: INTR 4330, 4370, QAST Level 1/1 or equivalent, or permission of program coordinator. Corequisite: INTR 4382. Restricted to students who have been admitted to the Interpretation program. Continuation of sign to voice and voice to sign transliterating skills development. Course includes practice in appropriate sign/spoken vocabulary selection, the matching or register in the formal setting, and quality voice production. Students will focus on transliterating signed/spoken English in highly technical situations and develop specialized vocabulary in areas typically utilizing transliterators. Three credit hours.

INTR 4382 Advanced Interpretation: ASL – English
Prerequisites: INTR 4330, 4370, QAST Level 1/1 or equivalent, or permission of program coordinator. Corequisite: INTR 4380. Restricted to students who have been admitted to the Interpretation program. Continuation of the interpretation process between ASL and English including application of process skills, contrastive ASL-English linguistics, contrastive cultural analysis, and teaming skills for the consecutive and simultaneous interpretation process. Designed to include practice of requisite skills and process tasks of increased complexity with unplanned and planned language samples, such as dialogues, monologues, interviews, and lectures from a variety of interpreting settings. Three credit hours.

INTR 4384 Interpreting Academic Subjects
Prerequisites: INTR 4330, 4370, 4346, QAST Level 1/1 or equivalent, or permission of program coordinator. Restricted to students who have been admitted to the Interpretation program. Emphasis will be on the process of interpreting/transliterating skills across a variety of academic subjects commonly taught in elementary through post-secondary settings. Emphasis on incorporating and pairing conceptually accurate sign usage within a variety of English-bound sign systems, as well as acquisition of specialized sign vocabulary for academic content areas. Three credit hours.

INTR 4770 Internship
Prerequisites: Completion of all B.A. requirements. Practical experience in settings such as educational, rehabilitation, community service centers, and agencies serving children, adolescents, and/or adults who are deaf or hard of hearing. Designed to provide students with the opportunity to synthesize practical and academic experiences gained during the in-residence portion of the program. The site, supervision, and plan of activity will be agreed upon mutually by student and instructor before the semester begins. Seven credit hours.
There are five units housed in Educational Leadership including:

1. Educational Administration and Supervision (EDAS),
2. Educational Foundations (EDFN),
3. Gifted and Talented Education (GATE),
4. Higher Education (HIED), and

The EDAS program offers masters degrees, specialist degrees, school level administrator licensure, central office administrator licensure, superintendency licensure, and a doctoral degree in Educational Administration and Supervision tailored to the candidates professional needs and aspirations; Higher Education (HIED) offers two masters degrees, College Student Affairs and Two-Year College Teaching, and a doctorate with concentrations in Faculty Development, Higher Education Administration, Student Affairs Administration, or Two-Year College Leadership; the Gifted and Talented Education (GATE) program offers a masters degree and licensure in Gifted and Talented Education P-8 and/or 7-12, a concentration in Gifted Education in the EDAS doctorate, and a certificate in Teaching Advanced Placement; and the Learning Systems Technology (LSTE) offers a masters degree with specialty areas in Instructional Program Development, Educational Technology Product Development, and Educational Technology Management. The Educational Foundations (EDFN) unit does not offer degrees however, is an integral component of all College of Education programs offering courses throughout the college.

### Courses in Educational Foundations (EDFN)

**EDFN 1190 Career Planning and Life Options**
A systematic approach to developing decision-making skills and an orientation to the world of work. The focal point of the course is the student and his or her goals. Emphasis is on clarifying and formulating realistic career goals and an appropriate career plan and strategy to achieve these goals. Credit/no credit. One credit hour.

**EDFN 2300 American Education**
Prerequisite: sophomore standing. The philosophical, sociological, psychological, and historical foundations of American education, especially in public schools. The course will provide opportunities for each student to develop an official certification/degree plan and to apply for admission to the teacher education program. Three credit hours.

**EDFN 3304 Assessment in the Middle School Curriculum**
Study of available assessment methods and the integration of these methods in planning, modifying, and evaluating instruction, and in reporting outcomes to varied constituencies. After completing this course, students will meet basic assessment competencies as outlined in the Arkansas Principles for Licensure for Beginning Teachers and The Standards for Teacher Competence in the Educational Assessment of Students (1990). Three credit hours.

**EDFN 3320 Introduction to Educational Psychology**
Prerequisite: PSYC 2300. Applications of psychological principles to the learning and teaching processes; emphasis on learning, cognitive development, social development, discipline, intelligence, evaluation, and measurement. Three credit hours.

**EDFN 4205 Diagnostic and Evaluative Procedures in Education**
A study of fundamental statistical concepts and their use in understanding standardized test results. Emphasis on the exploration of qualitative methods and evaluating and reporting progress. Two credit hours.

**EDFN 4158, 4258, 4358, 4458 Educational Foundations Workshop**
Designed to strengthen offerings in education and meet the needs of teachers for further training at the in-service level. One, two, three, or four credit hours.

**EDFN 4100, 4200, 4300, 4400, 4500 Independent Study in Educational Foundations**
In-depth study of topics in educational foundations for pre-service elementary teachers, junior or senior high school teachers, or adult education teachers. One, two, three, four, or five credit hours.

### Courses in Teaching Students who are Deaf or Hard of Hearing (TDHH)

**TDHH 4301 Foundations of Education for Deaf and Hard of Hearing Students**
This foundations course is a broad-based introductory course to the profession of teaching students who are deaf or hard of hearing. This course articulates the historical background, philosophical approaches, and current trends, problems, and issues in the education of the deaf and hard of hearing. An overview of the psychological, emotional, and educational problems of the deaf and hard of hearing is included. Knowledge of contemporary educational processes and programs for deaf or hard of hearing infants, children, and adolescents are incorporated into the course content. Dual-listed in the UALR Graduate Catalog as TDHH 5301. Three credit hours.
The Department of Teacher Education offers two bachelor of science in education (B.S.E.) degrees, the B.S.E. in early childhood education and the B.S.E. in middle childhood education which includes specialties in math/science and social studies/language arts. A minor in secondary education is offered through the teacher education department as well. For details about secondary education licensure content areas, see the licensure officer in the College of Education.

The department strives to provide balanced teacher education programs that embody institutional and college goals, the Arkansas Department of Education teacher licensure requirements, guidelines of learned societies and professional associations, and contemporary educational philosophies and practices.

**General Information**

The department also offers master of education degrees (M.Ed.) in curriculum and instruction, early childhood education, middle childhood education, reading, secondary education, and special education. The department offers a graduate certificate and an educational specialist degree (Ed.S.) in Reading, and a Ph.D. in Reading. Secondary Education, Middle Childhood, and Early Childhood also offers an initial licensure programs at the graduate level for students already holding bachelors degrees who desire teacher licensure. More information about the graduate level programs may be obtained from the department or from the UALR Graduate Catalog.

**Exit Requirements (see program requirements for specific exit requirements)**

In order to graduate with a degree from a program in teacher education and to be licensed, students must meet all general graduation requirements and earn a grade of C or greater in all professional education courses. Documentation of successful completion of all required Praxis II examinations must be provided as a condition for graduation from the undergraduate early childhood program, middle childhood program, and the secondary education minor. Students must submit complete Praxis II exam scores to the College of Education as documentation of their successful completion of these tests.

Arkansas’ definition of program completers for Title II reporting purposes has been changed. It requires completion of a degree program and successful performance on all required sections of required tests.

**EARLY CHILDHOOD EDUCATION DEGREE REQUIREMENTS**

**Core Requirements (44 hours) (Must be completed before admission into this program as well as passing the Praxis 1 examination.)**

- PSYC 2300 Psychology and the Human Experience
- and SOCI 2300 Introduction to Sociology are recommended choices in the core curriculum

**Floating Block (11 hours)**

- Second Language, ASL, or ESL Requirement
- HSCI 3211 Health and Safety in Early Childhood
- SOCI 3346 Sociology of the Family
- 3 hours of Arkansas History

**Block I (16 hours)**

- ECED 2200 Field Experience I
- ECED 2300 Introduction to Early Childhood Education
- ECED 2301 Language and Literature and Literacy I
- ECED 2302 Child Growth and Development
- TCED 4204 Educational Technology
- ECED 3304 Integrated Science: Preschool and Primary
### Block II (17 hours)
- ECED 3200 Field Experience II
- ECED 3300 Guiding Young Children
- ECED 3301 Language, Literature, and Literacy II
- LANG 4324 Teaching People of other Cultures
- MATH 3380 Mathematics I for Early Childhood
- MUED 3232 Early Childhood Music

### Block III (17 hours)
- ECED 3201 Field Experience III
- ECED 3302 Language, Literature, and Literacy III
- ARED 3345 Public School Art
- MATH 3382 Mathematics II for Early Childhood
- ECED 4399 Early Childhood Assessment
- SPED 4301 Education of Exceptional Learners

### Block IV (12 hours)
- ECED 4301 Internship Seminar I
- MATH 3382 Mathematics II for Early Childhood
- ECED 4306 Early Childhood Social Studies

### Block V (12 hours)
- ECED 4307 Internship Seminar II
- ECED 4901 Internship II

---

### Middle Childhood Education Specialty in Social Studies/Language Arts

**Core Requirements (47 hours)**
- ANTH 2316 Cultural Anthropology  
  or GEOG 2312 Cultural Geography  
  or ENGL 2337 World Literature  
  or ENGL 2338 World Literature Themes  
  or HIST 2311 U.S. History to 1877  
  or HIST 2312 U.S. History since 1877

**Second Language Requirement (6 hours)**

**Self-contained Classroom Preparation (3 Hours)**
- MATH 1302 College Algebra  
  or 1315, College Mathematics (Whichever is not taken for core.)

**Social Studies/Language Arts Specialty (21 hours)**

**Language Arts (9 hours)**
- RHET 3301 Editing for Usage, Style, and Clarity  
  3 hours literature  
  3 hours rhetoric and writing (3000 level or higher)

**Social Studies (12 hours)**
- POLS 1310 American National Government  
  or HIST 2311 U.S. History to 1877  
  or HIST 2312 U.S. History since 1877

### Middle Childhood Education Specialty in Math/Science

**Core Requirements (47 hours)**
- MATH 1302 College Algebra  
  or ENGL 2337 World Literature  
  or ENGL 2338 World Literature Themes  
  or HIST 2311 U.S. History to 1877  
  or HIST 2312 U.S. History since 1877  
  or POLS 1310 American National Government

**Second Language Requirement (6 hours)**

**State of Arkansas Department of Education Requirement (3 hours)**
- HIST 4355 History of Arkansas  
  Math/Science Specialty (21 hours)
  Note: Math 3383, 3384, and 4380, taken in Blocks I, II and III below are also required for the MS specialty.

**Math/Science Specialty – Math (9 hours)**
- MATH 1303 Trigonometry  
  MATH 1451 Calculus I  
  or MATH 1342 Business Calculus  
  or MATH 1311 Applied Calculus  
  MATH 2310 Discrete Mathematics (optional)

**Math/Science Specialty – Lab Science (12 hours)**
- 8 additional hours of core laboratory science in two departments not already selected to fulfill core lab science requirement.
- 4 additional hours of science

### Block I – Introduction to the Profession (13 hours)
- MCED 3105 Field Experience I  
  or MCED 3301 Middle Level Philosophy, Trends, Family, and the Community  
  MCED 3303 Curriculum and Planning  
  MATH 3383 Mathematics for Middle School  
  SCED 4321/5321 Teaching Diverse Adolescents

### Block II – Curriculum Applications (19 hours)
- IGSC 4401 Integrated Science Methods  
  or MATH 3384 Concepts of Geometry  
  or MCED 3240 Field Experience II  
  or MCED 3310 Middle Level Literacy and Literature  
  or MATH 3384 Concepts of Geometry  
  or MCED 3430 Integrated Middle Level Curriculum  
  or SPED 4301 Education of Exceptional Learners

**Summer Course (3 hours)**
- EDFN 3304 Assessment in the Middle School Curriculum
Courses in Reading (READ)

READ 0310 College Reading
A combined lecture/reading lab course designed to improve reading vocabulary and comprehension strategies needed for success in college. Students required to take this course must complete it satisfactorily before enrolling in RHET 1312 Composition II. A, B, C, NC. Three credit hours.

READ 1310 College Study Skills
Prerequisite: READ 0310 if required. Provides practical instruction in skills needed for success and retention in college. Three credit hours.

READ 1311 Reading for Academic Content
Prerequisite: READ 0310 if required. A combination laboratory and lecture course designed for students who want practical information on improving their reading rate and comprehension. Students will be introduced to scholastic reading strategies and methods for use in their other college courses. Three credit hours.

Courses in Early Childhood Education (ECED)

ECED 2200 Field Experience I
This field experience will acquaint candidates with a variety of preschool or kindergarten experiences. Candidates will be oriented to the structure of school district, the school, and the classroom setting. Students are placed with a cooperating teacher in a pre-K or Kindergarten classrooms for the full day each Friday for 13 weeks. Candidates are required to submit a “field reflection” each week to their University Supervisor, and organize a “field notebook” with the required items. Two credit hours.

ECED 2300 Introduction to Early Childhood Education
Prerequisites: admission to early childhood education program. Students are introduced to the early childhood education profession. The history and current issues in early childhood education are explored. Infant, toddler, preschool, kindergarten, and primary education are explored from a developmentally appropriate practice perspective. The concepts of inclusion, interaction of family, community, school, and multiculturalism are explored in the context of legal and ethical considerations. Three credit hours.

ECED 2301 Language and Literature and Literacy I
Prerequisites: admission to early childhood education program and concurrent enrollment in ECED 2200. Students will become acquainted with the value of literature shared in active learning environments, especially designed for young children. The course includes an extensive view of literature written for children from birth through age eight with an examination of developmentally appropriate ways to interact with children about books and stories. Students will develop activities and implement them in a field placement. Three credit hours.

ECED 3200 Field Experience II
Candidates spend one full day a week in a classroom with young children in grades 1 or 2 for 14 weeks. They are expected to complete assignments from ECED 3301 Language and Literature and Literacy I. Three credit hours.

ECED 2302 Child Growth
Prerequisites: admission to early childhood education program and concurrent enrollment in ECED 2200. Study of environmental and hereditary influences on cognitive, affective, and psychomotor development of typically and atypically developing children from birth to adolescence. Students consider both predictable developmental patterns and unique patterns due to sexual, socioeconomic, cultural, and normal variations in inherited characteristics. Students observe, record, and analyze behavior and development of children in an educational setting. Concurrent enrollment in ECED 2200 is required. Four credit hours.

ECED 3201 Field Experience III
Candidates spend one full day a week in a classroom with young children in grades 3 or 4 for 14 weeks. They are expected to complete assignments from ECED 3302 Language and Literature and Literacy II. This field experience will acquaint candidates with a variety of preschool or kindergarten experiences. Candidates spend one full day a week in a classroom with young children in an educational setting. Concurrent enrollment in ECED 2200 is required. Four credit hours.

ECED 3203 Professional Practicum II (12 hours)
MCED 4303 Professional Seminar
MCED 4602 Internship II
TCED 4320 Interactive Technology for Middle School

ECED 3204 Integrated Science
MCED 4120 Licensure Seminar
MCED 4501 Internship I
MCED 4310 Middle Level Content Literacy
MCED 4330 Classroom Management
MATH 4380 Concepts in Probability and Statistics
ECED 4301 Internship Seminar I
This seminar is designed to teach advanced strategies in guidance, teaching, planning and professionalism. The course will review material previously covered in the program of study and explore it at a more complex level. Particular attention is focused on the teacher as decision-maker and the link between assessment and pedagogical decision-making. All aspects of the class will ask students to connect the course content to their daily experiences in their internship classroom. A major assignment in the course will be to write detailed lesson plans for the week in their internship when they will be responsible for all classroom planning and teaching. Three credit hours.

ECED 4306 Early Childhood Social Studies
This course provides the opportunity for students to analyze and develop integrated curricula in social studies from a variety of historical and current perspectives, within the context of professional, state and local standards. Students integrate knowledge from the six disciplines of social studies (history, anthropology, sociology, political science, geography, and economics) into the design of a constructivist, inquiry-based social studies curriculum. The course explores ways children come to learn about themselves and others. There is an emphasis on meeting the needs of all children, including attention to diverse linguistic and cultural backgrounds, and different learning abilities and styles. Three credit hours.

ECED 4399 Early Childhood Assessment
A study of fundamental observation, assessment, and evaluation concepts and tools. Emphasis placed on both qualitative and quantitative methods of reporting student progress. Principles of classroom test construction, alternative assessment techniques, and measurement strategies at various developmental levels will be addressed. Students will learn to accurately interpret standardized test results and be exposed to ethical and legal considerations surrounding use and reporting of assessment results. Three credit hours.

ECED 4307 Internship Seminar II
Prerequisites: completion of the Teaching the Curriculum semester and simultaneous enrollment in ECED 4901: Internship II. The Professional Seminar follows the student's completed field experience. Topics include analysis of field experiences; review of legal issues affecting educational practice; preparing for job interviews; preparation for the first teaching year; maintaining a professional portfolio to demonstrate growth; reflecting on personal development; and meeting the Arkansas Teacher Licensure Standards. Concurrent enrollment in ECED 4602 Internship II is required. Five credit hours.

ECED 4399 Early Childhood Assessment
A study of fundamental observation, assessment, and evaluation concepts and tools. Emphasis placed on both qualitative and quantitative methods of reporting student progress. Principles of classroom test construction, alternative assessment techniques, and measurement strategies at various developmental levels will be addressed. Students will learn to accurately interpret standardized test results and be exposed to ethical and legal considerations surrounding use and reporting of assessment results. Three credit hours.

ECED 4600 Internship I
Concurrent enrollment in ECED 4301 Internship Seminar I is required. The internship semester is designed for candidates to observe, participate and gradually assume complete responsibility for the classroom. They will plan, teach, and reflect on their classroom experience. Candidates will plan and implement modifications for children, including accommodation for ability level, exceptionalities, language and cultural differences. Inclusion of technology in their lessons is expected. Six credit hours.

ECED 4901 Internship II
Concurrent enrollment in ECED 4307 Internship Seminar II. The internship semester is designed for candidates to observe, participate and gradually assume complete responsibility for the classroom. They will plan, teach, and reflect on their classroom experience. Candidates will plan and implement modifications for children, including accommodation for ability level, exceptionalities, and language and cultural differences. Inclusion of technology in their lessons is expected. Development is required. Six credit hours.

Courses in Middle Childhood Education (MCED)

MCED 3105 Field Experience I
This field experience will acquaint students with a variety of middle school experiences, and provide a 40 hour experience in a middle school classroom. Students will be oriented to the structure of a school district, the school, and the classroom setting. All concurrent courses in the Introduction to the Profession block will include assignments or specific tasks to be completed by students during the 40 hour classroom placement in this field experience. One credit hour.

MCED 3240 Field Experience II
Prerequisite: admission to the middle childhood teacher licensure program and successful completion of MCED 3105. This field experience will focus on working with students in small groups. Students will spend time in a middle school classroom working with students. Students will be expected to complete assignments related to all concurrent courses during the classroom placement. During this field experience students will continue to develop their professional portfolio and community resource file. Three credit hours.

MCED 3301 Middle Childhood Education, Family, and the Community
Prerequisite: admission to the teacher education program. Corequisite: MCED 3105. Presents strategies for working with families, state agencies, and community organizations from a middle childhood perspective. Information is provided about the nature, history, and philosophy of middle childhood education; the organization and structure of middle schools; teacher advisory systems; morally responsive teaching; teaching teams; multiculturalism; and diversity. Three credit hours.

MCED 3303 Middle Childhood Curriculum and Planning
Students will be oriented to the scope of the middle grades curriculum, varying patterns of curriculum organization, activities, and transition based teaching and general problem solving for instructional planning assessment and management. Introduction of the materials and various technology media used in teaching at the middle level. Field based experience required. Three credit hours.

MCED 3310 Middle Level Literacy and Literature
Provides the student with a broad perspective of literature and literacy instruction for middle school students with language as a central focus of study. Emphasis on exploring ways of engaging adolescents in meaningful literacy learning. Specific focus on differentiating instruction and integrating adolescent literature and writing throughout the curriculum. Involves preparation and evaluation of assessment and teaching procedures and strategies and a review of background information related to the reading process. Three credit hours.
MCED 3320 Integrating Curriculum: Language Arts and Social Studies
Prerequisite: admission to the middle childhood education program and completion of RHET 1311, 1312; SPCH 1300; HIST 1311, 1312; HIST 2311 or 2312; POLS 1310; a three-hour literature course; a three-hour geography course; and completion of the Introduction to the Profession block. This course facilitates the understanding of how to teach social studies and language arts through an integrated approach in the most effective way to children in the middle grades. Instructional techniques that teach students how to involve children in social, interactive learning will be presented. Students will plan for and provide developmentally appropriate hands-on experiences with appropriate materials and the supportive environment necessary for children’s meaningful exploration and discovery and will implement those experiences in a field placement. Students will also be required to conduct assessments of learning. Three credit hours.

MCED 3330 Integrating Curriculum: Science and Mathematics
Prerequisites: admission to the middle childhood education program and completion of eight hours of science and nine hours of mathematics. Corequisite: MCED 3320. Emphasizes integrated mathematics and science content and how to teach this content to middle level children. The student should use the content to develop thematic concepts which are implemented through the methodologies of inquiry based, hands-on learning with the use of manipulatives. Students utilize the internet and technology as an integrative tool to develop pedagogical techniques and materials in relation to whole course design with cross-disciplinary focus and active student involvement. Three credit hours.

MCED 3402 Middle Childhood and Early Adolescent Development and Learning
Corequisite: MCED 3105 Field Experience I. A study of the hereditary and environmental influences on the cognitive, emotional, physical, sexual, and social development of children from birth through adolescence with a special emphasis on their pre- and early adolescent development. The impact of the broader culture and atypical development will also be part of the course’s focus. Students observe, record, and analyze behavior and development of children in an educational setting. Four credit hours.

MCED 4120 Licensure Seminar
A review of educational psychology, assessment, motivation, and student expectations. Classroom scenarios requiring application of teacher decision-making skills and classroom management strategies will be presented. In addition, students will analyze case studies. Prepares students for the Praxis II examination; in order to pass this seminar, students must attain the standard set by the Arkansas State Board of Education. One credit hour.

MCED 4501 Internship I
Prerequisites: admission to middle childhood education program and completion of the Introduction to the Profession and Curriculum Applications semesters. Corequisites: MCED 4310 and 4330. Classroom observation and participation in classroom routines with gradual assumption of complete classroom teaching responsibilities. Students plan, teach, and reflect on the total experience. Students make accommodations for children with special needs. All of the school resources are used, and competence in using technology is required. Three credit hours.

MCED 4303 Professional Seminar
Corequisite: MCED 4502. Part of final semester, Professional Practicum II. Presentations by College of Education faculty and practitioners in the field concerning such topics as legal issues affecting educational practice; family constellations; adolescent misbehavior; behavior analysis; discipline involving logical and natural consequences in place of rewards and punishments; and encouragement. Students create a professional portfolio, and submit a senior exit project utilizing interactive technology. Students learn how to prepare for job interviews; what to expect the first teaching year; how to maintain a professional portfolio to demonstrate growth; how to reflect on personal development; and what is involved in meeting the Arkansas Teacher Licensure Standards. Four credit hours.

MCED 4310 Middle Level Content Literacy
Emphasis on the development of reading in the content areas for middle school students. Focus on the concepts of developing meaningful literacy experiences for adolescents of all ability levels, with a continued focus on language and literature as an integral part of the curriculum. Involves a study of major theories and current teaching strategies in literacy for adolescents. Evaluation and assessment strategies explored. Three credit hours.

MCED 4430 Classroom Management
Emphasizes fundamental principles underlying middle childhood developmental programs in middle level grades, including creation of and fostering of classroom management techniques and strategies for the design of environments which are conducive to a safe place for teaching, learning, and connecting the community to the school for effective discipline and parental support and involvement. Four credit hours.

MCED 4602 Internship II
Prerequisites: admission to the middle childhood education program and the successful completion of Internship I. Corequisite: concurrent enrollment in TCED 4320. The final field placement course. Students plan, teach, and reflect on the experience. Students responsible for all aspects of the classroom environment including making accommodations for children with special needs. All of the school resources will be used, and competence in using technology is required. Five credit hours.

Courses in Special Education (SPED)

SPED 4214 Early Childhood Special Education Assessment Field Experience
Prerequisites: Admission to the Early Childhood Education Program and eligible for admission to Block III with a 2.65 GPA or greater. This is the first experience in a series of two supervised field experiences. During the 120 clock hour experience, candidate field practice emphasizes assessment and early intervention assessment activities related to child find/screening, translating assessment into activities in the intervention environment and assessments surrounding health and safety issues, children with health and/or sensory impairments, social development, and challenging behavior. Dual-listed in the UALR Graduate Catalog as SPED 5214. Two credit hours.

SPED 4216 Early Childhood Special Education: Inclusion Field Experience
This is final experience in a series of supervised field experience designed for candidates in the Early Childhood Special Education emphasis. The experiences included in this 120 clock hour experience examine assessment to intervention activities related to all developmental domains, technology adaptations in intervention, the link between individualized intervention plans and instructional planning, and continuous documentation of child performance. Dual-listed in the UALR Graduate Catalog as SPED 5216. Two credit hours.

SPED 4301 Education of Exceptional Learners
Prerequisite: PSYC 2300 or consent of instructor. Introduction to the psychological, sociological, philosophical, legal, and educational implications of educating exceptional learners in the mainstream; the role of teachers, professionals, and parents as team members in providing appropriate education and necessary adaptations for exceptional learners. Dual-listed in the UALR Graduate Catalog as SPED 5301. Three credit hours.

SPED 4102, 4202, 4302 Workshop
Subjects vary. One, two, or three credit hours.
SPED 4306 Methods of Teaching Students with Mild Disabilities
Prerequisite: an introductory course in exceptional learners and/or characteristics of students with mild disabilities. Methods and materials for educating students with mild disabilities in regular and special education environments including behavior management, programming for secondary students with mild disabilities, career education, teacher-made materials, and commercially available materials appropriate for use with students with mild disabilities. Three credit hours.

SPED 4108, 4208, 4308 Independent Study
Prerequisite: consent of the department chairperson. An in-depth study of a selected problem or trend in special education for advanced students. One, two, or three credit hours.

SPED 4311 Behavior Management
Prerequisite: EDFN 2300. Positive approaches to behavior management. Students receive firsthand experience in using behavior analysis in field settings. Dual-listed in the UALR Graduate Catalog as SPED 5311. Three credit hours.

SPED 4312 Medical Problems in Child Development
Prerequisites: Admission to the Early Childhood Education Program and eligible for admission to Block III with a 2.65 GPA or greater. The primary concern of the course is to review medical conditions and events arising during prenatal, postnatal and early childhood which contribute to the nature and cause of major educational disabilities. Special attention is given to syndromes associated with mental retardation, disorders of the central nervous system, infections disease, and a wide range of conditions placing children at-risk for developmental delays. Emphasis is directed toward early medical identification, prevention of secondary disabilities, and strategies for responding to chronic health conditions in educational settings. Guest lectures by physicians and other related professionals are an integral part of the course. Dual-listed in the UALR Graduate Catalog as SPED 5312. Three credit hours.

SPED 4313 Early Childhood Special Education Assessment
Prerequisites: Admission to the Early Childhood Education Program and eligible for admission to Block III with a 2.65 GPA or greater. The first course in a two-course sequence addressing assessment and early intervention screening and assessment strategies for young children with disabilities, from birth through age eight. A specific focus will be given to the fundamental principles of and strategies for assessment, the role of well-baby and early intervention providers in screening and assessment process for disabilities. Candidates will learn to identify the needs of children related to health and/or sensory impairments, the identification of abilities in the developmental domains. Dual-listed in the UALR Graduate Catalog as SPED 5313. Three credit hours.

SPED 4315 Early Childhood Special Education: Methods of Inclusion
Prerequisites: Admission to the Early Childhood Education Program and eligible for admission to Block III with a 2.65 GPA or greater. This is the second course in a two-course sequence addressing intervention strategies for young children with disabilities, from birth through age eight. Specific attention is given to application of assessment principles into programming, the role of child find in providing services, the needs of young children with health and/or sensory impairments, strategies for identifying behavioral support needs and techniques for fostering social-emotional development. Attention also will be given to methods of including children with disabilities in the general education setting. Dual-listed in the UALR Graduate Catalog as SPED 5315. Three credit hours.

SPED 4317 Introduction to Inclusion in Early Childhood and Elementary Education
Prerequisites: PSYC 1300 or an introductory human development course, admission to the Early Childhood Education Program, and eligible for admission to Block III with a 2.65 GPA or greater; or consent of the instructor. Psychological, Sociological, philosophical, legal, educational implications of educating exceptional learners; necessary adaptations for exceptional learners in the mainstream setting; role of teachers, professionals, parents as team members providing education for exceptional learners. Dual-listed in the UALR Graduate Catalog as SPED 5317. Three credit hours.

Courses in Teacher Education (TCED)

TCED 1100 Introduction to Teaching and Learning
This course satisfies the First-Year Course requirements for first-year students and is an introduction to teaching and learning in American elementary and secondary schools. The course is open for all first-time students, but is especially applicable for those who may be considering a major or minor in education and teaching as a career. The course includes introductions to the field of education, current issues in teaching and learning in schools, and a service-learning project involving the teaching and learning of school-age students in the Little Rock area. One credit hours.

TCED 1104 Introduction to K-12 Computing
An organized approach to computing practices for K-12 educators. One credit hour.

TCED 1200 Orientation to Teaching
Provide opportunities for students to observe in educational settings at the early childhood (preschool and primary levels) and middle childhood/early adolescence levels. Acquisition of understanding of the nature of the profession and its responsibilities to determine whether they are prepared to make a commitment to this profession. Students assisted in completing applications to licensure programs during this semester, should they decide to continue. Two credit hours.

TCED 3250 Computer Applications in Middle School
Prerequisite: TCED 1104. Applications of technology in the educational setting with specific emphasis on integrating instructional technology into the middle school curriculum. Two credit hours.

TCED 4100, 4200, 4300 Workshop
Prerequisite: consent of instructor (based on student’s experience and course work in the educational area). Designed to provide an opportunity for pre-service and in-service teachers to explore areas of interest and prepare educational materials through a workshop format. One, two, or three credit hours.

TCED 4104 Electronic Portfolio Development
Prerequisites: LSTE 3105 and 3106. The technology skills needed to develop an electronic portfolio. Each student required to demonstrate design skills for incorporating audio, visuals, and motion. Each student produces an electronic portfolio utilizing a current computer multimedia software program and translate or convert that product into language compatible with the World Wide Web. LSTE 4104 is a part of the professional semester of the early childhood education program. Students enrolling in this course must be admitted to the professional semester. One credit hour.

TCED 4301 Introduction to Instructional Technology
Prerequisite: EDFN 2300. The selection, use, and creation of 10 different types of fundamental media software found in today’s educational institutions. The student is required to teach a single unit using media created within the media center laboratory. Three credit hours.

TCED 4320 Interactive Technology for Middle School
The production and application of Interactive Instructional units where the microcomputer is the controlling medium for such peripherals as CD-ROM players and web browsers. Three credit hours.

TCED 4600 Clinical Experience/Student Teaching
Prerequisites: 12 credit hours of education courses at UALR, admission to the professional semester. Provides supervised experience in school settings during which the student participates in planning classroom activities. During the semester, students return to campus periodically for additional lectures and demonstrations to refine instructional skills necessary for effective teaching. Six credit hours.

UALR Undergraduate Catalog 153
The mission of the Donaghey College of Engineering and Information Technology (EIT) is to educate the next generation of engineering, construction and IT professionals and prepare them to be successful and productive members of the workforce.

In meeting this mission, the College offers professional undergraduate degrees in Architectural & Construction Engineering, Civil and Construction Engineering, Computer Science, Construction Management, Engineering Technology, Information Science, and Systems Engineering with options in Mechanical, Electrical, Computer, and Telecommunications Engineering. Graduate students have the option to pursue a PhD in Integrated Computing or Engineering Science and Systems.

EIT also participates in the M.S.-Ph.D. program in Bioinformatics offered jointly with the University of Arkansas for Medical Sciences (UAMS). Additional graduate programs include an M.S. degree in Computer Science, a graduate certificate program and an M.S. degree in Information Quality as well as a graduate certificate program in Technology Innovation. EIT also offers a graduate certificate program and an M.S. degree in Systems Engineering.

General Information

Outreach to the community includes extensive partnering with high schools across the state for in-school activities and summer programs held on the UALR campus. Specific emphasis is on partnerships with local and regional industries, including an extensive internship program, company-sponsored senior design projects and advisory council participation that provides direct industry input into EIT curricula.

EIT is committed to providing the engineering, construction and IT workforce that will build Arkansas’ future and to developing a quality faculty that can contribute both to our overall educational needs and to the intellectual base of the state. To accomplish these goals, EIT will work with all interested potential students to provide the necessary intellectual basis for them to be successful and will provide its faculty with facilities and resources to make major contributions to our state. We work closely with the UAMS and other educational institutions in the state and enhance our resources through the acquisition of external funds from federal agencies, private foundations, and other private enterprises.

EIT’s vision is to be the college of choice for students from the state who are interested in an engineering-, construction- or technology-based education; to have a faculty that is admired and respected regionally, nationally, and internationally; and to be the institution that area industries turn to for new employees and intellectual support for their growth strategies.

EIT Core Requirements

EIT has a core curriculum adapted to the needs of its engineering-, construction- and IT-oriented degrees. Each bachelor’s degree program requires a core that includes courses in communications, arts, humanities, history, and social sciences. No mathematics or science courses are in the core since all majors in the college already include substantial mathematics and science requirements. Systems Engineering and Civil and Construction Engineering have a further modified core included in their sections of this catalog.

Note that some programs require specific courses within the choices listed in the chart; please check the curriculum lists for individual programs.
EIT Core Curriculum

English Composition (9 hours)
- RHET 1311 Composition I
- RHET 1312 Composition II
- SPCH 1300 Speech Communication

Fine Arts/Humanities (5-6 hours)
One course from two of the following three blocks:

Fine Arts:
- MUHL 2305 Introduction to Music
- ARHA 2305 Introduction to Visual Art
- THEA 2305 Introduction to Theatre and Dance

Humanities:
- ENGL 2337 World Literature
- ENGL 2338 World Literature Themes
- PHIL 2320 Ethics and Society

Professional Ethics:
- IFSC 2200 Ethics in the Profession

Social Sciences (9 hours)
One course from the following:
- POLS 1310 American National Government
- HIST 2311 U.S. History to 1877
- HIST 2312 U.S. History since 1877

One course from the following:
- ANTH 2316 Cultural Anthropology
- CRJU 2300 Introduction to Criminal Justice
- ECON 2301 Survey of Economics
- GEOG 2312 Cultural Geography
- GNST 2300 Introduction to Gender Studies
- MCOM 2330 Mass Media and Society
- POLS 2301 Introduction to Political Science
- PSYC 2300 Psychology and the Human Experience
- RELS 2305 World Religions
- SOCI 2300 Introduction to Sociology

One course from the following:
- HIST 1311 History of Civilization I
- HIST 1312 History of Civilization II

Additional Communications, Humanities, Arts, and Social Sciences (3 hours)
Three upper-level hours in communication, humanities, arts, or social sciences are required. These hours should be selected to provide further depth in one of the disciplines represented by the core courses listed above. Specific course selection must be done with the approval of the advisor.

Technical Writing (3 hours)
One course from the following:
- RHET 3316 Writing for the Workplace
- RHET 3326 Technical Writing
- MGMT 3380 Business Communication

Core Requirements for Double Majors in EIT and Another Department

Either core is acceptable for a student pursuing a double major with one major in EIT and the other in a different college. However, should the student not complete the double major prior to a baccalaureate degree being awarded, the core required for the degree awarded must be completed. In all instances program requirements normally satisfied by a core course must be completed whether or not that course satisfies a core requirement for the student. (Approved by Undergraduate Council 10/13/99 - EIT is referred to as CISSE in the original policy.)

Departments

The following are departments within the college that offer majors:

Department of Computer Science
- Associate of Science in Computer Programming
- Bachelor of Science in Computer Science

Department of Construction Management & Civil and Construction Engineering
- Bachelor of Science in Architecture & Construction Engineering
- Bachelor of Science in Civil and Construction Engineering
- Bachelor of Science in Construction Management

Department of Engineering Technology
- Associate of Science in Electronics and Computer Engineering Technology
- Associate of Science in Mechanical Engineering Technology
- Bachelor of Science in Electronics and Computer Engineering Technology
- Bachelor of Science in Mechanical Engineering Technology
- Bachelor of Applied Technology

Department of Information Science
- Bachelor of Science in Information Science
- Bachelor of Science in E-Commerce

Department of Systems Engineering
- Bachelor of Science in Systems Engineering – Computer
- Bachelor of Science in Systems Engineering – Electrical
- Bachelor of Science in Systems Engineering – Mechanical
- Bachelor of Science in Systems Engineering – Telecommunications
The department offers courses covering a wide range of topics in computer science, including programming and programming languages, data structures and algorithms, assembly language, computer architecture, networking, operating systems, compilers, software engineering, file structures, database systems, graphics, artificial intelligence, and theory of computation.

The department seeks to prepare students both for careers in the computing industry and for advanced study in computer science. The department maintains close ties with local computing industries, and encourages its students to participate in the many cooperative and internship opportunities made available through these contacts.

### General Information

The bachelor of science degree in computer science is accredited by the Accreditation Board for Engineering and Technology (ABET), Computing Accreditation Commission (CAC), a specialized accrediting body recognized by the Council on Post-secondary Accreditation (COPA), and the U.S. Department of Education.

### Admission Requirements

Students seeking a degree in computer science must apply to the department for admission to the program. Application should be made after the student has completed MATH 1302 or higher with grades of C or greater and enrolled in CPSC 1375/1175. Upon admission the student will be assigned an advisor.

### Degree Requirements

#### Major in Computer Science

Requirements for the B.S. degree in computer science include the core computer science and mathematics courses and upper-level electives selected from computer science.

#### Minor in Computer Science

The minor in computer science requires:

- CPSC 1375 Programming I
- CPSC 1175 Introduction to Computer Science Laboratory
- CPSC 2376 Programming II
or CPSC 2377 Introduction to Game Programming
- CPSC 2380 Data Structures and Algorithms
- CPSC 2382 Introduction to Computer Systems and Assembly Language
- CPSC 3380 Operating Systems
or CPSC 3370 Net-centric Computing: Systems Concepts
- MATH 1451 Calculus I
and MATH 1452 Calculus II
or MATH 1311 Applied Calculus I
and MATH 1312 Applied Calculus II
- One three-hour upper-level computer science course

### Associate of Science in Computer Programming

The associate of science degree in computer programming requires at least 60 hours including the core computer science courses and approved electives selected from computer science, mathematics, statistics, accounting, management, and engineering technology. The list of approved electives may be obtained from the Department of Computer Science.

### Approved Electives (23 hours)

The list of approved electives may be obtained from the Department of Computer Science.
Associate of Science Suggested Curriculum

Freshman Year
- RHET 1311 Composition I
- RHET 1312 Composition II
- SPCH 1300 Speech Communication
- HIST 2311 U.S. History to 1877
- or HIST 2312 U.S. History since 1877
- or POLS 1310 American National Government
- MATH 1302 College Algebra
- MATH 1303 Trigonometry
- CPSC 1375 Programming I
- CPSC 1175 Introduction to Computer Science Laboratory
- CPSC 1310 Internet Technologies
- Approved electives (8 hours)

Sophomore Year
- CPSC 2376 Programming II
- or CPSC 2377 Introduction to Game Programming
- CPSC 2380 Data Structures and Algorithms
- CPSC 2382 Introduction to Computer Systems and Assembly Language
- IFAS 2300 Introduction to Information Assurance
- Approved electives (15 hours)

Bachelor of Science in Computer Science

EIT Core Requirements

Computer Science Core
- CPSC 1175 Introduction to Computer Science Laboratory 1
- CPSC 1310 Internet Technologies
- CPSC 1375 Programming I
- CPSC 2376 Programming II 1
- or CPSC 2377 Introduction to Game Programming 1
- CPSC 2380 Data Structures and Algorithms 1
- CPSC 2382 Introduction to Computer Systems and Assembly Language
- CPSC 3370 Net-centric Computing: Systems Concepts
- CPSC 3371 Net-centric Computing: Language Concepts
- CPSC 3375 Database Concepts I
- CPSC 3482 Computer Organization I
- IFSC 2200 Ethics in the Profession
- CPSC 4373 Fundamentals of Software Engineering
- CPSC 4392 Capstone Project
- MATH 1451 Calculus I
- MATH 1452 Calculus II
- MATH 2310 Discrete Mathematics
- MATH 3310 Algebraic Structures I
- or MATH 3312 Linear Algebra
- STAT 3352 Applied Statistics I

Electives
- Nine hours of upper-level computer science courses, chosen in consultation with an advisor.
- No more than three hours of cooperative education (CPSC 3391 or 4391) can be used to satisfy the elective requirements.

Students majoring in computer science must take the following science courses: either the physics sequence PHYS 2321, 2121, 2322, 2122 or the chemistry sequence CHEM 1402, 1403; and one additional four-hour science course which meets the core science requirement in astronomy, biology, or earth science.

A minimum of three additional hours of mathematics or science courses for majors must be taken in addition to the mathematics and science requirements listed above.

Students must elect a minor field of study. Most minors require 18 to 24 hours of courses. A minor in mathematics is strongly recommended for computer science majors who plan to pursue graduate work in computer science.

Students are also reminded that they must take a total of at least 45 upper-level hours for the bachelor’s degree as they select their electives.

Bachelor of Science in Computer Science Suggested Curriculum (120 hours)

First Semester, Fall (15 hours)
- RHET 1311 Composition I
- MATH 1451 Calculus I
- HIST 1311 History of Civilization I
- or HIST 1312 History of Civilization II
- CPSC 1375 Programming I
- CPSC 1175 Introduction to Computer Science Laboratory
- CPSC/IFSC 1105 Freshman Experience

Second Semester, Spring (16 hours)
- RHET 1312 Composition II
- MATH 1452 Calculus II
- CPSC 1310 Internet Technologies
- CPSC 2376 Programming II
- SPCH 1300 Speech Communication

Third Semester, Fall (16 hours)
- Minor course (3 hours)
- CPSC 3370 Net-centric Computing: Systems Concepts
- CPSC 3371 Net-centric Computing: Language Concepts
- CPSC 3375 Database Concepts I
- CPSC 3482 Computer Organization I
- IFSC 2200 Ethics in the Profession
- MATH 1451 Calculus I
- MATH 1452 Calculus II
- MATH 2310 Discrete Mathematics
- MATH 3310 Algebraic Structures I
- or MATH 3312 Linear Algebra
- STAT 3352 Applied Statistics I

Fourth Semester, Spring (15 hours)
- Minor course (3 hours)
- CPSC 3370 Net-centric Computing: Systems Concepts
- CPSC 3375 Database Concepts I
- PHYS 2321 Physics for Scientists and Engineers I
- PHYS 2122 Physics for Scientists and Engineers II Laboratory
- HIST 2311 U.S. History to 1877
- or HIST 2312 U.S. History since 1877
- or POLS 1310 American National Government

Fifth Semester, Fall (16 hours)
- Fine Arts/Humanities core requirement (3 hours) 2
- CPSC 3371 Net-centric Computing: Language Concepts
- CPSC 3482 Computer Organization I
- MATH 3310 Algebraic Structures I
- or MATH 3312 Linear Algebra
- Minor Course (3 hours)

---

1. Students must receive a C or greater in this course.

2. See EIT Core Requirements.
Sixth Semester, Spring (16 hours)
- ARST 3385 Vector Graphics for Illustrators and Designers
- CPSC 3370 Net-centric Computing: Systems Concepts
- CPSC 4366 Interactive Computer Graphics and Animation
- CPSC 3387 Simulation Methods
- PHYS 2322 Physics for Scientists and Engineers II Laboratory

Seventh Semester, Fall (15 hours)
- ARST 3386 Digital Imaging for Illustrators and Designers
- IFSC 2200 Ethics in the Profession
- CRJU 2300 Introduction to Criminal Justice
- HIST 2311 U.S. History to 1877
- or HIST 2312 U.S. History since 1877
- or POLS 1310 American National Government
- CPSC 4373 Fundamentals of Software Engineering

Seventh Semester, Spring (14 hours)
- ARST 4348 Production Design for the Internet
- CPSC 4392 Capstone Project
- Math / Science Upper-Level (3000-4000) Elective (3 hours)
- Core Technical Science with Lab (4 hours)

**Bachelor of Science in Computer Science Suggested Curriculum—Game Option (120 hours)**

First Semester, Fall (15 hours)
- RHET 1311 Composition I
- MATH 1451 Calculus I
- SPCH 1300 Speech Communication
- CPSC/IFSC 1105 Freshman Experience
- CPSC 1375 Programming I
- CPSC 1175 Introduction to Computer Science Laboratory

Second Semester, Spring (16 hours)
- RHET 1312 Composition II
- MATH 1452 Calculus II
- ARST 1310 Basic Drawing
- CPSC 1310 Internet Technologies
- CPSC 2377 Introduction to Game Programming

Third Semester, Fall (15 hours)
- RHET 3326 Technical Writing
- MATH 2310 Discrete Mathematics
- IFSC 2340 Human Computer Interface
- CPSC 2382 Introduction to Computer Systems and Assembly Language
- CPSC 2380 Data Structures and Algorithms

Fourth Semester, Spring (15 hours)
- ARST 1315 Two-Dimensional Design
- STAT 3352 Applied Statistics I
- MATH 3312 Linear Algebra
- HIST 1311 History of Civilization I
- or HIST 1312 History of Civilization II
- ARHA 2305 Introduction to Visual Art

Fifth Semester, Fall (16 hours)
- ARST 2318 Designing with New Technologies
- CPSC 3371 Net-centric Computing: Language Concepts
- CPSC 4383 Artificial Intelligence
- IFSC 3315 Applied Networking
- PHYS 2321 Physics for Scientists and Engineers I Laboratory

---

2. See EIT Core Requirements.
To apply for this program, students must complete or have completed the following:

- RHET 1312 Composition II, or equivalent
- MATH 1302 College Algebra, MATH 1315 College Math, or equivalent

Submission of a formal application.

**Minor and/or Certificate in Information Assurance**

The IA Minor and Technical Certificate in Information Assurance consist of 20 hours in seven courses. All courses must be completed with a grade of C or greater.

Students matriculating through colleges other than EIT must obtain written consent from the instructors before enrolling in a course offered by EIT.

**Minor in Information Assurance Curriculum**

**Required Prerequisite (3 hours)**
- IFAS 2300 Introduction to Information Assurance

**Core Courses (8 hours)**
- CRJU 3309 Cyber Crime and the Law
- IFAS 3300 Computer Forensics
- IFSC 2200 Ethics in the Profession

**Computer Networking Course (3 hours)**
- MGMT 4310 Local Area Networks
- IFSC 3315 Applied Networking
- CPSC 4384 Computer Networks or CPSC 3370 Net-centric Computing: Systems Concepts
- SYEN 3332 Communication Networks

**Database Course (3 hours)**
- MGMT 4350 Business Database Management Systems
- IFSC 3320 Database Concepts
- CPSC 3375 Database Concepts I
- SYEN 3360 Data Communications

**Approved Elective (3 hours)**
- SYEN 3318 Decision and Risk Analysis
- MGMT 4311 Security Issues and Advanced Topics in Network Technologies
- IFSC 4339 Network Security
- IFSC 4330 Database Security
- IFSC 4310 Quantitative Analysis
- CPSC 3380 Operating Systems or CPSC 3370 Net-centric Computing: Systems Concepts
- CPSC 4376 Applied Cryptography

**Courses in Information Assurance (IFAS)**

**IFAS 2300 Introduction to Information Assurance**
Prerequisite: RHET 1312. Study of information security for roles as security professionals and business decision-makers. This course addresses knowledge areas of the Certified Information Systems Security Professional (CISSP) certification, including need for security, legal and ethical issues, risk management, security technologies and tools, and personnel security maintenance. Three hours lecture. Three credit hours.

**IFAS 3300 Computer Forensics**
Prerequisite: IFAS 2300 and knowledge of Unix or Linux, as well as Windows operating systems. Study of the preservation, identification extraction, documentation, and interpretation of computer data following clear, well-defined methodologies and procedures. This course can be repeated for credit with a different theme. Three hours lecture. Three credit hours.

**Courses in Computer Science**

**CPSC 1105 First Year Experience for CPSC/IFSC Majors**
A survey of the Computer and Information Science majors with coverage of Interpersonal and Team Communication skills, Time Management & Goal Setting, Techniques for Discovering, Organizing & Presenting Information, Self-Initiated Learning, and Overview of Campus-based resources. Activities include service learning projects, field trips, guest speakers, demonstrations, faculty presentations, and social networks. Two hour lab per week. One credit hours.

**CPSC 1175 Introduction to Computer Science Laboratory**
Prerequisite: MATH 1302 or equivalent. Corequisite: CPSC 1375. A laboratory course to accompany CPSC 1375. Introduction to editing, compiling, and executing programs on various platforms; UNIX operating system; number systems and number conversions; presentation software, and the internet resources. Successful completion of this course requires a grade of C or greater. Two hours laboratory per week. One credit hour.

**CPSC 1310 Internet Technologies**
See IFSC 1310. Internet Technologies.

**CPSC 1370 Computer Literacy**
The fundamental concepts of computing in a personal computer environment. Introduction to hardware and software and system configurations. The focus is on practical problem solving using popular PC application software for word processing, spreadsheets, and databases. This course may not be counted for credit toward a computer science major or minor. Three hours lecture per week. Three credit hours.

**CPSC 1372 RPG Programming**
Prerequisite: CPSC 1375, MGMT 1310, or equivalent. Report Program Generator is a nonprocedural language for data processing. Input, output, arithmetic, comparison, control breaks, arrays, sequential files, direct-access files. This course may not be counted for credit toward a computer science major or minor. Three hours lecture per week. Three credit hours.

**CPSC 1375 Programming I**
Prerequisite: MATH 1302 or equivalent. Corequisite: CPSC 1175. Introduction to algorithm development and implementation using control structures, functions, arrays, pointers, and basic object-oriented concepts. Successful completion of this course requires a grade of C or greater. Three hours lecture per week. Three credit hours.

**CPSC 2376 Programming II**
Prerequisite: CPSC 1375. Advanced programming concepts including structures, abstract data types, details of object-oriented concepts including encapsulation and polymorphism in current object-oriented language. Successful completion of this course requires a grade of C or greater. Three hours lecture per week. Three credit hours.

**CPSC 2377 Introduction to Game Programming**
Prerequisites: CPSC 1375, IFSC 2300 SYEN 1302. Advanced programming concepts including structures, abstract data types, recursive techniques, game based hands-on experiences for students to learn and understand details of advanced object-oriented concepts in a current object-oriented language. Successful completion of this course requires a grade of C or greater. Three hours lecture per week. Three credit hours.

**CPSC 2380 Data Structures and Algorithms**
Prerequisite: CPSC 2376 or CPSC 2377. A systematic study of the main data structures of computer science: arrays, stacks, queues, linked lists, trees, graphs, hash tables. Implementation and analysis of the algorithms and programming techniques for searching sorting, inserting into, and deleting form these structures; efficiency considerations. Successful completion of this course requires a grade of C or greater. Three hours lecture per week. Three credit hours.
CPSC 2382 Introduction to Computer Systems and Assembly Language
Prerequisite: CPSC 1375 or equivalent. Introduction to machine architecture, detailed study of the PC instruction set and addressing modes. Assembling, linking, executing, and debugging of assembly language programs. Additional topics include keyboard and screen handling, string processing, interrupts, binary and decimal arithmetic. Three hours lecture per week. Three credit hours.

CPSC 2391 Cooperative Education
Prerequisites: major in computer science, CPSC 2376 or CPSC 2377, and consent of department chairperson. Designed to complement and extend the classroom learning experience through the application of theoretical concepts in a professional work environment. A minimum of 200 hours of work with a participating employer. The exact number of work hours, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements coordinated with the Office of Cooperative Education. Three credit hours.

CPSC 2399 Special Topics
Prerequisite: CPSC 1370, 1375, or equivalent or the consent of the instructor. Introduction to a programming language to be selected from the following list: Visual BASIC, C, ADA, Perl, XML, scripting languages, internet programming. This course may be repeated with a different language. This course is not accepted for credit in the computer science major or minor. Three hours lecture per week. Three credit hours.

CPSC 3370 Net-centric Computing: Systems Concepts
Prerequisites: CPSC 2380 and CPSC 2382. Coverage of systems programming of net-centric computing systems. Hands-on experiences for students to learn how net-centric computing systems work and writing net-centric computing applications. Three hours lecture per week. Three credit hours.

CPSC 3371 Net-centric Computing: Language Concepts
Prerequisites: CPSC 2380 and CPSC 2382. Coverage of language design issues for net-centric computing systems. Hands-on experiences for students to learn and understand tradeoffs between applicative needs compared to language design and implementation issues. Three hours lecture per week. Three credit hours.

CPSC 3372 System Utilities
Prerequisite: CPSC 2376 or CPSC 2377. Job steps, file identification, program storage, data storage, cataloged procedures, libraries, utility programs. Three hours lecture. Three credit hours.

CPSC 3375 Database Concepts I
Prerequisites: CPSC 2380, MATH 2310. In-depth study of data models including E-R, EER, Relational, object relational, and other current models; Data language including relational algebra, relational calculus, SQL, and QBE; Database design including functional dependency and normalization; Database implementation using popular DBMSs; Application development using embedded SQL enhanced by web technology. Three hours lecture per week. Three credit hours.

CPSC 3380 Operating Systems
Prerequisites: CPSC 3370; MATH 1452 or equivalent. Buffering, physical input/output, and data management. Loaders, linkage editors, and relocation. Multiprogramming, scheduling resource allocation, and virtual memory. Three hours lecture per week. Three credit hours.

CPSC 3381 Enterprise COBOL Application Development
Prerequisites: CPSC 2376, CPSC 2377, or consent of the instructor. Accelerated programming in COBOL. Includes organization of COBOL programs, input, output, data manipulations, and tables, file organization, and file access methods. Subprogram, introduction to CICS programming. Three hours lecture per week. Three credit hours.

CPSC 3383 Language Structure
Prerequisites: CPSC 3371; MATH 2310. Concepts of syntax and semantics of grammars and languages. Study and comparison of the organization and major constructs of various programming language paradigms, with in-depth study of several specific languages. Implementation and compiler/interpreter-related issues. Three hours lecture. Three credit hours.

CPSC 3385 File Structures and Multimedia
Prerequisites: CPSC 2380 and MATH 1452 or equivalent. In-depth study of sequential, indexed, and direct file structure; buffering, indexing; file systems; markup file structures including XML. Modern file representation including image files and sound files; Multimedia technology including CD-ROM, DVDs, and tape storage. Three hours lecture per week. Three credit hours.

CPSC 3386 Information Storage and Retrieval
Prerequisites: CPSC 2380, MATH 2310, 1452 or equivalent. The analysis of information content by statistical, syntactic, and logical methods. Search and matching techniques. Automatic retrieval systems, question answering systems. Evaluation of retrieval effectiveness. Three hours lecture per week. Three credit hours.

CPSC 3387 Simulation Methods
Prerequisites: CPSC 2380, STAT 3352 or equivalent, MATH 1452. Introduction to the design and analysis of discrete probabilistic systems using simulation. Basic concepts in modeling and analysis for both continuous and discrete systems are covered. Combined simulation methods, including integrated qualitative/quantitative system modeling. Emphasizes model construction and simulation language. Three hours lecture per week. Three credit hours.

CPSC 3391 Cooperative Education
Prerequisites: major in computer science, completion of the computer science freshman and sophomore core, and consent of department chairperson. Further work experiences to complement and extend the classroom learning experience through the application of theoretical concepts in a professional work environment. A minimum of 200 hours work with a participating employer. The exact number of work hours, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements coordinated with the Office of Cooperative Education. Three credit hours.

CPSC 3482 Computer Organization I

CPSC 4210 Computer Ethics
See IFSC 4210. Computer Ethics

CPSC 4360 Computer Security
Prerequisite: CPSC 3371 and 3482 or consent of instructor. Increasing reliance on our computer-based infrastructure elements along with information-driven nature of today’s business require a solid and in depth understanding of security issues pertinent to the systems. The topics include threats, assumptions, assurance, confidentiality, integrity, availability, access control matrix and policies, security models, requirements imposed by policies, protection models, covert channels, formal methods for security, designing and evaluating systems, intrusion detection, auditing and other contemporary issues. Three hours lecture per week. Three credit hours.
CPSC 4366 Interactive Computer Graphics and Animation
Prerequisite: MATH 2310 and knowledge of C, C++, or Java programming. This course addresses topics such as introduction to computer graphics and all the details of design of modern graphics architectures. The topics covered include two and three dimensional modeling and transformation, lighting and shading, animation techniques, introduction to OpenGL. Dual-listed in the UALR Graduate Catalog as CPSC 5366. Three hours lecture per week. Three credit hours.

CPSC 4370 Theory of Computation
Prerequisites: CPSC 3371, MATH 2310. A study of the main areas of theoretical computer science and their hierarchical interconnections. Basic results relating to formal models of computation, with emphasis on grammars and languages, finite automata, Turning machines, and computational complexity. Three hours lecture per week. Three credit hours.

CPSC 4371 Computer Documentation
Prerequisite: Senior standing in computer science and consent of instructor. The design and development of computer system documentation with emphasis on user documentation. Practical experience in writing a user manual using structured design methodology. Discussion of online documentation, hypertext, and emerging documentation technologies. Three hours lecture per week. Three credit hours.

CPSC 4372 Object-oriented Programming
Prerequisites: working knowledge of a procedural programming language and UNIX operating system, or consent of the instructor. Concepts of object-oriented analysis, design, and implementation. Object-oriented programming in C++, Smalltalk, Java, and/or another current object-oriented programming language. Dual-listed in the UALR Graduate Catalog as CPSC 5372. Three hours lecture. Three credit hours.

CPSC 4373 Fundamentals of Software Engineering
Prerequisites: CPSC 3370, CPSC 3371, and MATH 1452. Requirements definition, analysis and modeling including use cases and use case paths, domain models, state transition diagrams; techniques to increase robustness and avoid disastrous defects; object-oriented architecture and design patterns and specifications in UML; performance impact of design choices; analysis of designs regarding maintainability and testability; security engineering; practical system test and glass-box testing fundamentals; verification of test coverage via decision tables and state transition tables. Dual-listed in the UALR Graduate Catalog as CPSC 5373. Three hours lecture per week. Three credit hours.

CPSC 4375 Fundamentals of Database Management Systems
Prerequisites: CPSC 3375 or equivalent. Advanced topics related to the design and efficient implementation of modern database management systems. Concurrency and transaction management, database security, query processing, query optimization, physical database storage, and indexing. Dual-listed in the UALR Graduate Catalog as CPSC 5375. Three hours lecture per week. Three credit hours.

CPSC 4376 Applied Cryptography
Prerequisites: CPSC 2380, MATH 2310, and STAT 3352 or equivalents. A survey and study of the major cryptographic techniques, algorithms, and implementations, with emphasis on applications to communications and network security. Intended as a practical introduction to the current state-of-the-art of cryptographic usage. Dual-listed in the UALR Graduate Catalog as CPSC 5376. Three hours lecture. Three credit hours.

CPSC 4381 Computer Architecture and Design
Prerequisite: CPSC 3482. Formal description of computer architecture and design, instruction set architectures, processor design of modern computers, pipeline and instruction level parallelism, memory system design, and input and output system design. Dual-listed in the UALR Graduate Catalog as CPSC 5381. Three hours lecture per week. Three credit hours.

CPSC 4382 Compiler Construction
Prerequisites: CPSC 3371, MATH 1452, and MATH 2310. Introduction to machine intelligence. Emphasis upon different paradigms for problem solving such as various state-space search strategies and other approaches. Exposure to one or more key areas such as robotics, logic programming, machine learning, expert systems, planning, neural networks, natural language processing, reasoning, under uncertainty, etc. Three hours lecture per week. Three credit hours.

CPSC 4383 Artificial Intelligence
Prerequisites: CPSC 3371, MATH 1452 and MATH 2310. Introduction to machine intelligence. Emphasis upon different paradigms for problem solving such as various state-space search strategies and other approaches. Exposure to one or more key areas such as robotics, logic programming, machine learning, expert systems, planning, neural networks, natural language processing, reasoning, under uncertainty, etc. Three hours lecture per week. Three credit hours.

CPSC 4384 Computer Networks
Prerequisites: CPSC 3370 and CPSC 3482. Introduction to design and analysis of computer networks. Computer communications architecture and protocols, local and wide area networks, IP networks, bridging and routing, Ethernet, wireless LANs, sockets programming, and distributed applications. Dual-listed in the UALR Graduate Catalog as CPSC 5384. Three credit hours.

CPSC 4387 Distributed Computing
Prerequisites: CPSC 3370. Network-based client/server computing. Topics include TCP/IP, object-oriented technology, distributed objects and their interfaces, JDBC, remote method invocation, CORBA, and web-based software system architecture. Three credit hours.

CPSC 4388 Smart Software Systems
Prerequisite: CPSC 3375, MATH 1452. Study of the concept, design, and implementation of rule-based systems, agent-based systems, reasoning, reasoning under uncertainty; belief systems, explanation systems; knowledge representation, knowledge acquisition, and knowledge discovery; and application of knowledge engineering in web technology. Dual-listed in the UALR Graduate Catalog as CPSC 5388. Three hours lecture per week. Three credit hours.

CPSC 4389 E-commerce: Analysis, Design, and Implementation
Prerequisites: CPSC 3371, 3375. E-commerce site analysis and design. Web-based system architecture, client/server computing, network protocols, software engineering for web based systems, computer networks, web-based databases, script languages (Java, VB), XML, ASP, SQL, and DSN. Three credit hours.

CPSC 4391 Cooperative Education
Prerequisites: major in computer science, CPSC 3391, and consent of department chairperson. Continuation of CPSC 3391. Work experiences to complement and extend the classroom learning experience through the application of theoretical concepts in a professional work environment. A minimum of 200 hours work with a participating employer. The exact number of work hours, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements coordinated with the Office of Cooperative Education. Three credit hours.

CPSC 4392 Capstone Project
Prerequisites: CPSC 3370, CPSC 3371, and CPSC 4373 or IFSC 3360. Capstone course in which student individually design a software system, document and present their conclusions. Students also develop a detailed undergraduate portfolio for a comprehensive review of their undergraduate work. Project work involves the development of design alternatives, development of an appropriate software architecture, and design and test the implemented system. The software design focuses on addressing overall design goals while understanding constraints of cost, etc. Deliverables and schedule are determined by the instructor. Three credit hours.
CPSC 4392 Capstone Project
Prerequisites: CPSC 3370, CPSC 3371, and CPSC 4373 or IFSC 3360. Capstone course in which student individually design a software system, document and present their conclusions. Students also develop a detailed undergraduate portfolio for a comprehensive review of their undergraduate work. Project work involves the development of design alternatives, development of an appropriate software architecture, and design and test the implemented system. The software design focuses on addressing overall design goals while understanding constraints of cost, etc. Deliverables and schedule are determined by the instructor. Three credit hours.

CPSC 4395, 4495, 4595 Internship
Prerequisites: senior standing in computer science, approval of assignment by advisor. Professional experience related to student’s discipline under supervision of advisor. Sixty hours work per credit hour. Three, four, or five credit hours.

CPSC 4399 Special Topics
Prerequisite: consent of instructor. Advanced topics in areas of current interest in computer science. Refer to the semester schedule for specific topics offered. Dual-listed in the UALR Graduate Catalog as CPSC 5399. Three hours lecture. Three credit hours.

CPSC 4100, 4200, 4300, 4400, 4500 Independent Study
Prerequisites: senior standing, at least 20 hours in computer science, consent of instructor. Designed for students who want to carry out special investigations. Topic and method of procedure must have approval of the supervising faculty member. Dual-listed in the UALR Graduate Catalog at the 5000-level. Sixty hours work per credit hour. One, two, three, four, or five credit hours.
Construction is our nation's largest industry. It encompasses the residential sector, commercial and retail buildings, office and high-rise structures, major industrial and process complexes, and engineering infrastructure such as highways, dams, bridges, airports, and seaports. The complexity of projects demands that professional constructors and engineers possess detailed knowledge of the many aspects of the industry to effectively lead and manage the design and construction processes.

UALR’s construction-related programs provide curricula that equip for a wide range of design, managerial, and supervisory roles within this multi-faceted, dynamic industry. Technological, computer, and software orientation assist our graduates to develop into contributing members of the architectural, engineering, and construction industry with high paying entry level jobs. There are substantial opportunities for rapid advancement and salary increases with experience in the industry. Career opportunities for our graduates can be found with general and specialty contractors, architectural and engineering design firms, testing laboratories, government agencies, financial institutions, insurance and surety companies, and manufacturers of construction equipment and products. The courses provide an in-depth study of construction management, construction science, engineering, business, mathematics, and sciences. Extensive applications with construction and engineering computer software and hardware emphasize the most current technologies used by industry.

General Information

Degrees Offered
- Bachelor of Science in Construction Management
- Bachelor of Science in Civil and Construction Engineering
- Bachelor of Science in Architectural and Construction Engineering†
- Master of Science in Construction Management†

†Note: Final approval to offer these two programs had not been received when this catalog went to press. Please consult the department office or the department website to determine the availability of these two programs.
Minor in Construction Management

The minor in construction management is available to all UALR students who want to learn about construction materials, methods, and management. Students are required to take eighteen credit hours of approved CNMG courses.

Admission Policy

After admission to UALR, any student may declare a major or minor in construction management. Admission to one of the department’s engineering majors requires readiness to take MATH 1451 Calculus I and CHEM 1406 General Chemistry for Engineers. Students may be provisionally admitted into one of the engineering majors before this, but they may require more than four years to complete the degree requirements.

Contact Information

To discuss the construction management programs, students should visit Mike Tramel in ETAS 203, call (501) 569-8133, or send e-mail to jmtramel@ualr.edu.

To discuss the civil and construction engineering program, or the architectural and construction engineering program, students should visit Nick Jovanovic in ETAS 202F, call (501) 569-8226, or send e-mail to nsjovanovic@ualr.edu.

For additional information, please visit the department website at ualr.edu/constructionmanagement/. Facsimiles may be sent to (501) 569-8341.

Work Experience Requirement

All students in the department are required to complete a minimum of 800 contact hours of practical work experience in an approved construction-related activity. This stipulation provides the graduate with valuable industry experience and insights.

Accreditation

The four-year baccalaureate, construction management program is accredited by the American Council for Construction Education (ACCE). The ACCE is recognized by the Council for Higher Education Accreditation as the national accrediting agency for four-year baccalaureate programs in construction education. Accreditation is a means for recognizing educational institutions that achieve and maintain a level of performance, integrity, and quality that entitles them to the confidence of the educational community and the public they serve. The UALR construction management program is the only such accredited program in the University of Arkansas system.

A new engineering program cannot seek accreditation until at least one student has graduated from the program. As new programs, the engineering programs offered by the department are not currently accredited.

Student Activities

The UALR construction management program has five student chapters and one honor society for student involvement. The student chapters are affiliated with the Associated General Contractors (AGC), the Associated Builders and Contractors (ABC), the National Association of Home Builders (NAHB), Construction Specification Institute (CSI), and the Forest Product Society (FPS). The Arkansas chapter of each association sponsors the student chapters and provides opportunities for students to interact and network with members of their organizations. Special student membership is also available with the American Concrete Institute (ACI), American Society of Professional Estimators (ASPE), National Association of Women in Construction (NAWIC), and the International Code Council (ICC). Students who meet the requirements can become members of Sigma Lambda Chi, the International Honor Society for Leaders in Construction. The UALR construction management program is a member of the Associated Schools of Construction (ASC) and participates in the ASC regional construction management competitions. Selected students can also compete in the sponsoring student chapter construction management competitions for ABC, AGC, and FPS.

Engineering students have the opportunity to become involved with several engineering organizations, including the American Society of Civil Engineers (ASCE), the American Society of Mechanical Engineers (ASME), the American Society of Refrigerating, and Air-conditioning Engineers (ASHRAE), the Society of Women Engineers (SWE), and Engineers Without Borders (EWB). Engineering students can participate in regional and national student competitions, such as the National Student Steel Bridge Competition, the Big Beam Contest, and the Charles Pankow Foundation Annual Architectural Engineering Student Design Competition.

Degree Requirements

Bachelor of Science in Construction Management

The construction management program is an interdisciplinary baccalaureate degree program that builds upon construction methods, engineering techniques, and business courses offered in the Donaghey College of Engineering and Information Technology and the College of Business. The integrated curriculum provides a foundation for the capstone courses offered in the senior year and the required passage of the Associate Constructor (AC) examination.

A minor is not required, but may be obtained from the College of Business. Students seeking a Bachelor of Science degree in Construction Management must pass each CNMG course with a grade of C or greater.
BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT: MAJOR REQUIREMENTS (125-126 CREDIT HOURS)

UALR First-Year Colloquium Requirement (1 credit hour)
CNMG 1101 First-Year Colloquium in Construction

EIT Core Curriculum Requirements (29-30 hours)

Written & Oral Literacy (9 credit hours)
RHET 1311 Composition I
RHET 1312 Composition II
SPCH 1300 Speech Communication

Fine Arts (2-3 credit hours, select one)
ARHA 2305 Introduction to Visual Art
or THEA 2305 Introduction to Theatre and Dance
or MUHL 2305 Introduction to Music
or IFSC 2200 Ethics in the Profession

World Humanities (2-3 credit hours, select one)
ENGL 2337 World Literature
or ENGL 2338 World Literature Themes
or PHIL 2320 Ethics and Society
or IFSC 2200 Ethics in the Profession

World History (3 credit hours, select one)
HIST 1311 History of Civilization I
or HIST 1312 History of Civilization II

U.S. Traditions (3 credit hours, select one)
POLS 1310 American National Government
or HIST 2311 U.S. History to 1877
or HIST 2312 U.S. History since 1877

Individuals, Cultures, and Societies (6 credit hours)
ECON 2301 Survey of Economics
ECON 4324 Environmental Economics

Technical Writing (3 credit hours)
MGMT 3380 Business Communication

Business and Management (9 credit hours)
ACCT 2310 Principles of Accounting I
MKTG 2380 Legal Environment of Business
MGMT 4372 Construction Business Management
(plus 9 hours of ECON and MGMT course in the EIT Core Requirements)

Mathematics and Science (23 credit hours)
MATH 1302 College Algebra
MATH 1303 Trigonometry
MATH 1342 Business Calculus or equivalent
MGMT 1310 Fundamentals of Information Technology
ERSC 1302 Physical Geology
ERSC 1102 Physical Geology Laboratory
PHYS 1321 Elementary Physics I
PHYS 1121 Elementary Physics I Laboratory

Math/Science Elective (select one):
IFSC 4399 ST: EIT Professional Skills
or STAT 2350 Introduction to Statistical Methods
or ERSC 1303 Historical Geology

Construction Management and Civil and Construction Engineering Courses (60 credit hours)
CNMG 1201 The Construction Industry
CNMG 1205 Drawings and Specifications
CNMG 2313 Construction Materials
CNMG 2113 Construction Methods I
CNMG 2314 Mechanical, Electrical, and Plumbing (MEP) Systems
CNMG 2114 Construction Methods II
CNMG 2316 Construction Surveying
CNMG 2218 Building Information Modeling
CNMG 2323 Construction Administration
CNMG 3321 Steel Construction
CNMG 3322 Concrete Construction
CNMG 3327 Field Engineering and Construction Equipment
CNMG 3333 Statics and Strength of Materials
CNMG 3339 Estimating I
CNMG 3347 Engineering Soil Mechanics
CNMG 4310 Construction Financial Management
CNMG 4211 Estimating II
CNMG 4218 Construction Modeling and Design
CNMG 4322 Building Structure Design
CNMG 4329 Construction Planning and Scheduling
CNMG 4334 Construction Contracts and Law
CNMG 4342 Construction Safety
CNMG 4245 Construction Management Capstone
CNMG 4145 Professional Constructor Certification

CNMG Electives (3-6 credit hours)

Bachelor of Science in Civil and Construction Engineering

The civil and construction engineering program focuses on structural engineering, geotechnical engineering, and construction engineering. However, the program also exposes students to the other major areas of civil engineering, including materials engineering, environmental and water resources engineering, highway engineering, and surveying, through required or elective courses.

A minor is not required. Students seeking a Bachelor of Science degree in Civil and Construction Engineering must pass each CNMG course with a grade of C or greater, must achieve at least a 2.00 grade point average (GPA) in the major (all required MATH, STAT, CHEM, PHYS, CNMG and SYEN courses), and also must pass both the Fundamentals of Engineering (FE) and the Associate Constructor (AC) examinations.

1. All full-time freshmen entering college for the first time and all transfer students with less than 12 hours of credit must take an approved UALR First-Year Colloquium (FYC) course. Any approved FYC course may be substituted for CNMG 1101. Students who are exempt from the FYC requirement are not required to take CNMG 1101 and CNMG 1201, but must substitute three hours of CNMG electives if they are not taken.

2. IFSC 2200 can be used to satisfy either the Fine Arts or the World Humanities requirement, but not both.

3. Students who have passed the Associate Constructor examination will substitute CNMG 3195 Community Service Projects for CNMG 4145.
BACHELOR OF SCIENCE IN CIVIL AND CONSTRUCTION ENGINEERING: MAJOR REQUIREMENTS (127-128 CREDIT HOURS)

UALR First Year Colloquium Requirement (0-1 credit hour)
CNMG 1101 First Year Colloquium in Construction¹

ADHE State Minimum Core General Education Courses (35 credit hours)
English/Communication Requirement (6 hours)
Composition
RHET 1311 Composition I
and RHET 1312 Composition II

Mathematics Requirement (3 hours)
MATH 3322 Introduction to Differential Equations

Science Requirement (8 hours)
CHEM 1406 General Chemistry for Engineers
and PHYS 2321 Physics for Scientists and Engineers I
and PHYS 2121 Physics for Scientists and Engineers I Lab

U.S. Government Requirement—choose one (3 hours)
HIST 2311 U.S. History to 1877
or HIST 2312 U.S. History since 1877
or POLS 1310 American National Government

Fine Arts/Humanities/Social Science Requirements—choose three (9 hours)
ANTH 2316 Cultural Anthropology
or ARHA 2305 Introduction to Visual Art
or CRJU 2300 Introduction to Criminal Justice
or ECON 2301 Survey of Economics
or ENGL 2337 World Literature
or ENGL 2338 World Literature Themes
or ERSC 2300 Science and Technology in Society
or GEOG 2312 Cultural Geography
or GNST 2300 Introduction to Gender Studies
or HIST 2311 History of Civilization I
or HIST 2312 History of Civilization II
or MCOM 2330 Mass Media and Society
or MUHL 2305 Introduction to Music
or PHIL 2320 Ethics and Society
or POLS 2301 Introduction to Political Science
or PSYC 2300 Psychology and the Human Experience
or RELS 2305 World Religions
or SOCI 2300 Introduction to Sociology
or SPCH 1300 Speech Communication
or THEA 2305 Introduction to Theatre and Dance
or Any CHIN, FREN, GERM, INTR, or SPAN course

Additional Math and Science—in place of Fine Arts/Humanities/Social Sciences (6 hours)
STAT 3352 Applied Statistics I and

Science Requirement (choose one):
ENHS 2320 Introduction to Environmental Health Sciences
or ERSC 3372 Surficial Hydrology
or ERSC 4371 Engineering Geology
or Another science course approved by Program Coordinator

Additional Mathematics and Basic Science Courses for Major (15 credit hours)
Mathematics (take all three courses)
MATH 1451 Calculus I and
MATH 1452 Calculus II and
MATH 2453 Calculus III.

Math/Science Requirement (choose one course)
One of the science requirement courses listed earlier
or CHEM 1403 General Chemistry II
or MATH 2310 Discrete Mathematics
or PHYS 2322 Physics for Scientists and Engineers II
or STAT 3353 Applied Statistics II
or Another math or science course approved by the Program Coordinator

Construction Management and Civil and Construction Engineering Courses (71 credit hours)
CNMG 1205 Drawings and Specifications
and CNMG 1213 Civil/Construction Engineering Materials
and CNMG 2313 Construction Materials
and CNMG 2113 Construction Methods I
and CNMG 2314 Mechanical, Electrical, and Plumbing (MEP) Systems
and CNMG 2114 Construction Methods II
and CNMG 2316 Construction Surveying
and CNMG 2218 Building Information Modeling
and CNMG 2323 Construction Administration
and CNMG 2370 Engineering Statics
and CNMG 2274 Thermal and Fluid Engineering
and CNMG 3302 Engineering Economy
and CNMG 3312 Engineering Structural Analysis
and CNMG 3327 Field Engineering and Construction Equipment
and CNMG 3339 Estimating I
and CNMG 3347 Engineering Soil Mechanics
and CNMG 3374 Hydraulic Engineering
and CNMG 3376 Engineering Structural Mechanics
and CNMG 4211 Estimating II
and CNMG 4321 Reinforced Concrete Design
and CNMG 4329 Construction Planning and Scheduling
and CNMG 4334 Construction Contracts and Law
and CNMG 4342 Construction Safety
and CNMG 4245 Construction Management Capstone
and CNMG 4351 Foundation Design
and CNMG 4371 Structural Steel Design
and CNMG 4285 Civil/Construction Engineering Design Project
and CNMG 4185 Professional Engineering Seminar

Other Engineering Requirements (choose a total of at least 6 credit hours)
CNMG 3321 Steel Construction
CNMG 3322 Concrete Construction
CNMG 3371 Engineering Dynamics
CNMG 4380 HVACR Engineering Fundamentals
CNMG 4381 Thermal Powerplant Engineering
CNMG 4389 Professional Engineering Licensure
CNMG 4391 Cooperative Education
CNMG xx99 Special Topics in Construction approved by the Program Coordinator
Other engineering course(s) approved by the Program Coordinator

¹ All full-time freshmen entering college for the first time and all transfer students with less than 12 hours of credit must take an approved UALR First-Year Colloquium (FYC) course. Any approved FYC course may be substituted for CNMG 1101.
Goals, Objectives, and Outcomes for the Civil and Construction Engineering Program

The goals of the civil and construction engineering program are to:

- Prepare students for successful engineering or management careers in the architecture, engineering, and construction (AEC) industry or related fields.
- Provide employers with a well-educated workforce that is ready and able to perform valuable civil and construction engineering and managerial services immediately after graduation.
- Encourage the growth of knowledge-based industry and stimulate economic growth in Arkansas.

Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program’s constituencies. The educational objectives of the civil and construction engineering program are to produce graduates who:

1. Rapidly become certified Engineer Interns (EI) and Associate Constructors (AC) employed in architecture, engineering, construction, or related fields or pursuing graduate or professional education in engineering, business, law, architecture, etc.

2. Become licensed Professional Engineers (PE) and/or Certified Professional Constructors (CPC) after gaining the required professional experience and the requisite knowledge to pass the licensing and/or certification exams.

3. Engage in lifelong learning, through on-the-job training, participation in professional societies, additional formal education, continuing education and professional development, research, and self-study, in order to use state-of-the-art knowledge to design and build safe and effective buildings and infrastructure and/or provide high quality service to the general public, employers, clients, and other professionals.

Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program. The civil and construction engineering program will produce graduates who have:

- 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 a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in lifelong learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Bachelor of Science in Architectural and Construction Engineering

The architectural and construction engineering program focuses on structural engineering, mechanical engineering, electrical engineering, and construction engineering, in the context of integrated building system design and construction. The program also introduces students to architectural history and design principles.

A minor is not required. Students seeking a Bachelor of Science degree in Architectural and Construction Engineering must pass each CNMG course with a grade of C or greater, must achieve at least a 2.00 grade point average (GPA) in the major (all required MATH, STAT, CHEM, PHYS, CNMG, and SYEN courses), and also must pass both the Fundamentals of Engineering (FE) and the Associate Constructor (AC) examinations.

Bachelor of Science in Architectural and Construction Engineering: Major Requirements (127-128 credit hours)

UALR First Year Colloquium Requirement (0-1 credit hour)
CNMG 1101 First Year Colloquium in Construction

ADHE State Minimum Core General Education Courses (35 credit hours)

English/Communication Requirement (6 hours)
Composition
RHET 1311 Composition I
and RHET 1312 Composition II

Mathematics Requirement (3 hours)
MATH 3322 Introduction to Differential Equations

Science Requirement (8 hours)
CHEM 1406 General Chemistry for Engineers
and PHYS 2211 Physics for Scientists and Engineers I
and PHYS 2212 Physics for Scientists and Engineers I Lab

U.S. Government Requirement—choose one (3 hours)
HIST 2311 U.S. History since 1877
or HIST 2312 U.S. History since 1877
or POLS 1310 American National Government

Fine Arts/Humanities/Social Science Requirements—choose three (9 hours)
ARHA 2310 Survey of the History of Art I
and ARHA 2311 Survey of the History of Art II
and one of the following:
ANTH 2316 Cultural Anthropology
or CRJU 2300 Introduction to Criminal Justice
or ECON 2301 Survey of Economics
or ENGL 2337 World Literature
or ENGL 2338 World Literature Themes
or ERSC 2300 Science and Technology in Society
or GEOG 2312 Cultural Geography
or GNST 2300 Introduction to Gender Studies
or HIST 1311 History of Civilization I
or HIST 1312 History of Civilization II
or MCOM 2330 Mass Media and Society
or MUHL 2305 Introduction to Music
or PHIL 2326 Ethics and Society
or POLS 2301 Introduction to Political Science
or PSYC 2300 Psychology and the Human Experience
or RELS 2305 World Religions
or SOCI 2300 Introduction to Sociology

Note: All full-time freshmen entering college for the first time and all transfer students with less than 12 hours of credit must take an approved UALR First-Year Colloquium (FYC) course. Any approved FYC course may be substituted for CNMG 1101.
Goals, Objectives, and Outcomes for the Architectural and Construction Engineering Program

The goals of the architectural and construction engineering program are to:

• Prepare students for successful engineering or management careers in the architecture, engineering, and construction (AEC) industry or related fields.

• Provide employers with a well-educated workforce that is ready and able to perform valuable architectural and construction engineering and managerial services immediately after graduation.

• Encourage the growth of knowledge-based industry and stimulate economic growth in Arkansas.

Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program’s constituencies. The educational objectives of the architectural and construction engineering program are to produce graduates who:

1. Rapidly become certified Engineer Interns (EI) and Associate Constructors (AC) employed in architecture, engineering, construction, or related fields or pursuing graduate or professional education in engineering, business, law, architecture, etc.

2. Become licensed Professional Engineers (PE) and/or Certified Professional Constructors (CPC) after gaining the required professional experience and the requisite knowledge to pass the licensing and/or certification exams.

3. Engage in lifelong learning, through on-the-job training, participation in professional societies, additional formal education, continuing education and professional development, research, and self-study, in order to use state-of-the-art knowledge to design and build safe and effective buildings and/or provide high quality service to the general public, employers, clients, and other professionals.

Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program. The architectural and construction engineering program will produce graduates who have:

• 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 a global, economic, environmental, and societal context.

• A recognition of the need for, and an ability to engage in lifelong learning.

• A knowledge of contemporary issues.

• An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
Courses in Construction Management and Civil and Construction Engineering

In general, courses are offered only in the term that is indicated in the course description. However, courses may be offered in other terms if sufficient student demand exists and if qualified instructors are available.

CNMG 1101 First-Year Colloquium in Construction
An introduction to construction engineering and construction management, along with goal setting, time management, and the on- and off-campus resources needed for success at UALR. Hands-on activities and group projects explore various concepts in construction. Satisfies the UALR First Year Colloquium requirement. Two hours lab. One credit hour. Fall only.

CNMG 1201 The Construction Industry
Introduction to the construction industry and the career opportunities available within residential, building, heavy civil, and industrial construction. The different roles of the various participants are examined along with industry history and traditions. Proper dress and safety requirements for office and field site visits discussed. Includes guest speakers, field trips, and project site visits. One hour lecture, three hours lab. Two credit hours. Fall only.

CNMG 1205 Drawings and Specifications
Introduction to basic construction drawings and specification interpretation. Emphasis on construction drawings and blueprint reading. CSI specifications and master format, project manual, shop drawings, as-built drawings, and proper construction terminology. One hour lecture, three hours lab. Two credit hours. Fall only.

CNMG 1213 Civil and Construction Engineering Materials
Prerequisites: CHEM 1406 and MATH 1451, or consent of instructor. Properties of materials and materials science, including atomic structure and bonding, lattice structures and defects, grain structure, alloys, and phase diagrams. Construction engineering materials, including steel, aluminum, aggregates, Portland cement, concrete, masonry, asphalt, wood, and composites. One hour lecture. Three hours lab. Two credit hours. Fall only.

CNMG 2113 Construction Methods I
Prerequisite concurrent: CNMG 1205 or consent of instructor. Construction methods and hands-on projects related to foundations, framing, doors, windows, finish carpentry, and masonry. Three hours lab. One credit hour. Spring only.

CNMG 2313 Construction Materials
Prerequisite concurrent: CNMG 1205 or consent of instructor. Introduction to specifications, standards, codes, quality control, and quantity survey as they pertain to the execution of selected construction materials. Topics include site work, concrete, masonry, steel, rough and finish carpentry, thermal and moisture protection, doors and windows, finishes, and specialties. Three hour lecture. Three credit hours. Spring only.

CNMG 2114 Construction Methods II
Prerequisite concurrent: CNMG 1205 or consent of instructor. Construction methods and hands-on projects related to interior and exterior finishes, thermal and moisture protection, plumbing, and electrical wiring. Three hours lab. One credit hour. Fall only.

CNMG 2314 Mechanical, Electrical, and Plumbing (MEP) Systems
Prerequisite concurrent: CNMG 1205 or consent of instructor. Introduction to functions of service systems within a modern structure. Includes heating, ventilating, air-conditioning (HVAC), plumbing, fire protection, electrical, and conveying systems. Three hours lecture. Three credit hours. Fall only.

CNMG 2316 Construction Surveying
Prerequisite: CNMG 2313 and MATH 1303, or consent of instructor. Introduction to the principles of construction surveying, project layout, and field performance and surveying equipment management. Topics will include use and care of surveying instruments, directions, angles, surveying calculations, errors, and computations of areas and volumes. Two hours lecture, three hours lab. Three credit hours. Spring only.

CNMG 2218 Building Information Modeling
Prerequisite: CNMG 2313, or consent of instructor. The course will focus on utilizing basic functions of Building Information Modeling (BIM) for residential and commercial construction. During the course, students will examine geometry, spatial relationships, geographic information, quantities and properties of building components. Students will create virtual models of buildings that can be used for quantity take-offs. One hour lecture and three hours lab. Two credit hours. Spring only.

CNMG 2323 Construction Administration
Prerequisites: CNMG 2313 and 2314, or consent of instructor. An introduction to construction project control and administration through computer applications. Topics include project team development, standard agreements, contract documents utilization, record keeping, submittals, subcontract management, purchasing, expediting, change orders, claims, progress payments, closeout, and internet-based project control. Three hours lecture. Three credit hours. Spring only.

CNMG 2370 Engineering Statics
Prerequisite: PHYS 2321 or consent of instructor. Prerequisite concurrent: MATH 2453 or consent of instructor. Static equilibrium of particles, equivalent systems of forces, equilibrium of rigid bodies, centroids and centers of gravity; analysis of structures, dry friction, and moments of inertia. Two hours lecture. Two hours lab. Three credit hours. Cross listed as SYEN 2370. Fall only.

CNMG 2274 Thermal and Fluid Engineering
Prerequisites: CHEM 1406, MATH 1452, and PHYS 2321, or consent of instructor. An integrated introduction to thermodynamics, fluid mechanics, and heat transfer. Topics include thermodynamic properties, the laws of thermodynamics, cycles, and psychrometers; conservation of mass, momentum, and energy in fluid flow; introduction to conduction, convection, and radiation heat transfer. One hour lecture. Three hours lab. Two credit hours. Fall only.

CNMG 2199, 2299, 2399 Special Topics in Construction
Prerequisites: consent of instructor based on relevance of subject matter to student career goals. Designed to meet special needs of students or industry to cover application of construction management or construction engineering to specific problems. Meets equivalent of one hour per week for each credit hour value. May be taken more than once for credit. One, two, or three credit hours. Offered on demand.

CNMG 3302 Engineering Economy
Prerequisite: MATH 1311, 1342 or 1451, or consent of instructor. Introduction to engineering economic decisions for evaluating the worth of products, services, projects and systems; time value of money, economic equivalence concepts, comparison of investment alternatives, evaluating economic life and replacement analysis, inflation, depreciation and impact of taxes on engineering decisions, and economic risk analysis. Three hours lecture. Three credit hours. Cross listed as SYEN 3301. Spring only.

CNMG 3312 Engineering Structural Analysis
Prerequisites: MATH 2453 and CNMG 3376, or consent of instructor. Structural analysis of trusses, beams, frames, cables, and arches, including determinate and indeterminate structures; deflections of beams and frames; introduction to stiffness methods and matrix analysis of structures. Two hours lecture. Two hours lab. Three credit hours. Fall only.

CNMG 3321 Steel Construction
Prerequisite: CNMG 3333 or consent of instructor. Structural steel materials, shapes and uses; structural steel specifications and construction practices; structural steel fabrication and erection techniques, practices, and estimation; bolting, welding, and cutting of structural steel; construction techniques for stairs, bar joists and girders, tilt-ups, and steel deck; steel drawings, including set-up, design, detail, and erection drawings; estimating structural steel quantities and pricing. Two hours lecture. Two hours lab. Three credit hours. Fall only.
CNMG 3322 Concrete Construction
Prerequisite: CNMG 3333 or consent of instructor. Provides an in-depth examination of the principles and applications of concrete construction. Study of process of placing ready mix concrete from batching to curing along with the design, analysis, and economics of formwork. Reinforcing steel, the ACI field technician applications, and the ACI Flatwork Technician Certification are also covered. Two hours lecture, two hours lab. Three credit hours. Spring only.

CNMG 3327 Field Engineering and Construction Equipment
Prerequisite: CNMG 3347 or consent of instructor. Principles of construction project field supervision and construction equipment. Leadership, motivation, communications, problem solving, decision making, production control, quality control, and computerized reporting. Earth moving fundamentals, equipment ownership and operating costs, and equipment selection and usage. Two hours lecture, two hours lab. Three credit hours. Fall only.

CNMG 3333 Statics and Strength of Materials
Prerequisites: CNMG 2313, MATH 1303 and 1342, and PHYS 1321/1121, or consent of instructor. An analytical and practical approach to the principles and physical concepts of statics and strength of materials related to construction. Two hours lecture, two hours lab. Three credit hours. Fall only.

CNMG 3339 Estimating I
Prerequisite: MATH 1303 and CNMG 2323, or consent of the instructor. Theory and practice of construction project bidding and estimating. Topics include proposal solicitation and preparation, bidding strategy, estimate types and content, quantity survey, ethics, and an introduction to computer use in estimating. Three hours lecture. Three credit hours. Fall only.

CNMG 3347 Engineering Soil Mechanics
Prerequisites: CNMG 3333 or 3376, or consent of instructor. Introduction to soils and foundation engineering and construction soil mechanics technology. Students will study engineering properties of soils, soil field exploration procedures, soil test reports, soil compaction and stabilization construction methods, water movement in soils, moisture control and drainage procedures, in-situ stress distribution in shallow and deep soils, shear strength of clay, silt and sand soils and design of shallow building foundations. Students will perform ASTM soil testing to support the course content and generate laboratory technical reports for major laboratory tests performed during the course. Two hours lecture and two hours laboratory. Three credit hours. Spring only.

CNMG 3370 Statics and Dynamics
Prerequisites: PHYS 2321 or consent of instructor. Prerequisite concurrent: MATH 2453 or consent of instructor. Statics of particles, equivalent systems of forces, equilibrium of rigid bodies, centroids and centers of gravity, analysis of structures, friction, moments of inertia, kinematics and kinetics of particles, introduction to kinematics and kinetics of rigid bodies, forces and accelerations. Three hours lecture. Three credit hours. Cross listed as SYEN 3370. This course is no longer offered.

CNMG 3371 Engineering Dynamics
Prerequisite: CNMG 2370 or consent of instructor. Kinematics and kinetics of particles, systems of particles, and rigid bodies; energy and momentum methods; mechanical vibrations and resonance; introduction to structural dynamics due to time-varying loads, such as wind and seismic loading. Two hours lecture. Two hours lab. Three credit hours. Cross listed as SYEN 3371. Offered on demand.

CNMG 3372 Engineering Materials
Prerequisites: CHEM 1402 and MATH 1451, or consent of instructor. Atomic structure and bonding, crystal structures, crystal geometry, solidification, crystalline imperfections, diffusion in solids, mechanical properties of metals, polymeric materials, phase diagrams, engineering alloys, ceramics, composite materials, corrosion. Three hours lecture. Three credit hours. Cross listed as SYEN 3372. Fall only.

CNMG 3374 Hydraulic Engineering
Prerequisite: CNMG 2370. Prerequisite concurrent: CNMG 2274. Properties of water; hydrostatics; water flow in pipes; pipelines and piping networks; water pumps; water flow in open channels; hydraulic structures; introduction to hydrology. Two hours lecture. Two hours lab. Three credit hours. Spring only.

CNMG 3376 Engineering Structural Mechanics
Prerequisites: CNMG 1213 and 2370, or consent of instructor. The study of deformation in structural materials: stresses and strains due to tension, compression, torsion, and bending; internal shear forces and bending moments; stress and strain transformations; design of beams and analysis of beam deflections; buckling of columns; introduction to the deformation of structures. Two hours lecture. Two hours lab. Three credit hours. Spring only.

CNMG 3378 Engineering Thermodynamics
Prerequisites: CHEM 1402, PHYS 2321, and MATH 1452, or consent of instructor. Properties of pure substances, thermodynamic processes, heat and work, the first law of thermodynamics, closed systems, enthalpy, open systems, the second law of thermodynamics, entropy, exergy, and an introduction to power and refrigeration cycles. Three hours lecture. Three credit hours. Cross listed as SYEN 3378. Fall only.

CNMG 3195 Community Service Projects
Prerequisites: Junior standing and consent of instructor. Students will complete at least 15 hours of community service with an approved nonprofit organization such as Children International. One credit hour. Offered on demand.

CNMG 4310 Construction Financial Management
Prerequisites: ACCT 2310 and CNMG 3339, or consent of the instructor. Concepts and principles of construction financial management: construction financial systems and transactions, financial statements, depreciation analysis, labor burden, overhead determination, bid profit margins, and profit center analysis. Three hours lecture. Three credit hours. Fall only.

CNMG 4211 Estimating II
Prerequisites: CNMG 3339 or consent of instructor. Advanced applications and concepts of construction project estimating. Topics include computer aided estimating, correcting estimating errors, labor and equipment productivity, risk adjustment to price, pricing by asset utilization, mark-up, and ethics. Students compete in mock bids on different types of construction projects. Two hours lecture. Two credit hours. Spring only.

CNMG 4218 Construction Modeling and Design
Prerequisites: CNMG 2218, 2314, and 3333 or 3370, or consent of instructor. Building information modeling (BIM) functions will be used for complex commercial construction; topographic information of sites, project datums, quantities and properties of building components, building sustainability analysis, documenting projects, and detailing of MEP or structural designs; rendering of exterior and interior views. One hour lecture and three hours lab. Two credit hours. Fall only.

CNMG 4321 Reinforced Concrete Design
Prerequisite: CNMG 3312 or consent of instructor. Behavior and design of reinforced concrete elements, including beams, columns, slabs, footings, foundations, and retaining walls; introduction to prestressed concrete design. Two hours lecture. Two hours lab. Three credit hours. Spring only.
CNMG 4322 Building Structure Design
Prerequisites: CNMG 3321 and 3322, or consent of instructor. Introduction to design and analysis of steel and concrete building structures. Student will study beams, columns, and tension components including fasteners and welds constructed from high strength structural steel following the AISC Manual, during the first half of the course. Reinforced concrete design and analysis procedures for rectangular beams and slabs for bending and shear loads and axially loaded round and square long columns will be studied during the second half of the course. The provisions of the ACI Code will be followed. Concrete prestressed beam technology will be included as well as steel rebar development. Two hours lecture and two hours problem lab. Three credit hours. Spring only.

CNMG 4329 Construction Planning and Scheduling
Prerequisite: CNMG 4211 or consent of instructor. An in-depth study of the process of creating and monitoring a construction project schedule. Creation of project schedules on a variety of scheduling software, with primary focus on Primavera. Three hours lecture. Three credit hours. Fall only.

CNMG 4334 Construction Contracts and Law
Prerequisites: senior standing and CNMG 2323, or consent of instructor. A study of construction contracts in relation to project delivery systems and the basic principles of construction law. Case studies are used to analyze selected areas that affect the construction process. Topics include standard agreements and conditions, negligence, risk, indemnities, modifications, mechanics lien, claims, dispute resolution, conflicts of interest, ethical consideration, and labor law. Three hours lecture. Three credit hours. Fall only.

CNMG 4342 Construction Safety
Prerequisites: junior standing or higher, or consent of instructor. A study of the principles of construction safety management and OSHA 29 CFR PART 1926. The OSHA Construction Industry Training Course 500 topics covered in depth. Students develop a company safety plan and hazardous communications program, perform safety analysis, conduct safety meetings, and write accident investigation reports. Students complete the topic requirements for the OSHA 10-hour and 30-hour Construction Safety and Health training card. Two hours lecture and two hours lab. Three credit hours. Spring only.

CNMG 4145 Professional Constructor Certification
Prerequisite: Senior standing or consent of instructor. Description of American Institute of Construction (AIC) certification programs and preparation for Constructor Qualifying Examinations leading to certifications as Associate Constructor (AC) and Certified Professional Constructor (CPC). Two hours lab. One credit hour. Spring only.

CNMG 4245 Construction Management Capstone
Prerequisites: Restricted to students in the final semester of the construction management or construction engineering program. A capstone course. Students develop and organize construction companies. Project contracts are awarded and contract administration is required. Two hours lecture. Two credit hours. Spring only.

CNMG 4351 Foundation Design
Prerequisites: CNMG 3347 and 4321, or consent of instructor. Design of shallow foundations: bearing capacity, settlement, spread footings, mats; design of deep foundations: structural integrity, axial and lateral load capacity; foundations on weak, compressive, expansive, or collapsible soils; design of earth retaining structures. Two hours lecture, two hours lab. Three credit hours. Spring only.

CNMG 4361 Green Construction
Prerequisite: Junior standing or higher. Overview of design and construction delivery systems for high performance green buildings; relevant criteria and established guidelines; green standards; high performance green buildings and sustainability; vocabulary associated with sustainability and green buildings; physical limitations of materials. Three hours lecture. Three credit hours. Offered on demand.

CNMG 4371 Structural Steel Design
Prerequisite: CNMG 3312 or consent of instructor. Behavior and design of structural steel elements, including connectors, tension and compression members, columns, and braced and unbraced beams; members under combined forces; joints and connecting elements; connections. Two hours lecture. Two hours lab. Three credit hours. Spring only.

CNMG 4174 Fluid Mechanics Laboratory
Prerequisite concurrent: CNMG 4374. Analysis of experimental data, basic electrical measurements and sensing devices, pressure measurement, flow measurement, temperature measurement, data acquisition and processing, report writing and presentation, design of experiments. Two hours lab. One credit hour. Cross listed as SYEN 4174. Spring only.

CNMG 4374 Fluid Mechanics
Prerequisites: CNMG 3370 and MATH 3322, or consent of instructor. Prerequisite concurrent: CNMG 3378 or consent of instructor. Properties of fluids, pressure and fluid statics, fluid kinematics, Bernoulli and energy equations, momentum, dimensional analysis, flow in pipes, differential analysis, approximation of the Navier-Stokes equation, drag and lift, compressible flow, open channel-flow, turbomachinery, CFD. Three hours lecture. Three credit hours. Cross listed as SYEN 4374. Spring only.

CNMG 4176 Mechanics of Materials Laboratory
Prerequisite concurrent: CNMG 4376 or consent of instructor. Analysis of experimental data, basic electrical measurements and sensing devices, force measurement, torque measurement, strain measurement, motion measurement, vibration measurement, data acquisition and processing, report writing and presentation, design of experiments. Two hours lab. One credit hour. Cross listed as SYEN 4176. Spring only.

CNMG 4376 Mechanics of Materials
Prerequisites: CNMG 3370, and 1313 or 3372, or consent of instructor. Stress, strain, axial loading, torsion, pure bending, analysis and design of beams, shearing stresses in beams and thin-walled members, transformation of stress and strain, principal stresses, deflection of beams, columns, energy methods. Three hours lecture. Three credit hours. Cross listed as SYEN 4376. Spring only.

CNMG 4379 Heat Transfer
Prerequisites: CNMG 3374 or 4374, or consent of instructor. Prerequisite concurrent: MATH 3322, or consent of instructor. Steady and transient heat conduction; forced, natural, and multiphase convection; heat exchanger design and analysis; radiation heat transfer; mass transfer. Three hours lecture. Three credit hours. Cross listed as SYEN 4379. Fall only.

CNMG 4380 Heating, Ventilating, Air-Conditioning, and Refrigeration (HVACR) Engineering Fundamentals
Prerequisite: CNMG 2274 or SYEN/CNMG 3378, or consent of instructor. Fundamentals of heating, ventilating, air-conditioning, and refrigeration (HVACR) engineering; refrigeration cycles; psychrometrics; indoor air quality and ventilation; heating and cooling loads. Two hours lecture, two hours lab. Three credit hours. Cross-listed as SYEN 4380. Fall only.
CNMG 4381 Thermal Powerplant Engineering
Prerequisite: CNMG 2274 or SYEN/CNMG 3378, or consent of instructor. Thermodynamics of combustion and power cycles; internal combustion engines; steam turbine powerplants; gas turbine powerplants; combined cycle powerplants; introduction to alternative energy systems. Two hours lecture. Two hours lab. Three credit hours. Cross listed as SYEN 4381. Offered on demand.

CNMG 4185 Professional Engineering Seminar
Prerequisites: Junior standing or higher, or consent of instructor. This course is a focused exploration of the Civil Engineering Body of Knowledge for the 21st Century, as developed by the American Society of Civil Engineers (ASCE). Students research the foundational, technical, and professional knowledge, skills, and attitudes necessary for success in the engineering profession and present their results to peers, through oral and written presentations. Three hours lab. One credit hour. Fall only.

CNMG 4285 Civil and Construction Engineering Design Project
Prerequisite: Restricted to students in the final semester of the civil and construction engineering program. Prepare for engineering practice by designing a major civil/construction engineering project, based on knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints (e.g., economic, ethical, and safety). One hour lecture, three hours lab. Two credit hours. Spring only.

CNMG 4389/5389 Professional Engineering Licensure
Prerequisite concurrent: Senior standing and registration for the Fundamentals of Engineering exam, or consent of instructor. Legal, regulatory, and ethical issues related to the practice of engineering; preparation for engineering licensure examinations. Two hours lecture. Three hours lab. Three credit hours. Cross listed as SYEN 4389/5389. Offered on demand.

CNMG 4391 Cooperative Education
Prerequisites: junior standing, declared major in construction management or construction engineering, and cumulative GPA of at least 2.50; approval of assignment by department chairperson. Requires at least 200 contact hours on the job. Three credit hours. Offered on demand.

CNMG 4395 Professional Development
Prerequisites: senior standing and consent of instructor. Partnerships between students and nonprofit community organizations will be established. Students use skills in construction management or construction engineering to assist with construction-related projects. Service hours will be established at the beginning of the course. Three credit hours. Offered on demand.

CNMG 4199, 4299, 4399 Special Topics in Construction
Prerequisites: consent of instructor based on relevance of subject matter to student career goals. Designed to meet special needs of students or industry to cover application of construction management or construction engineering to specific problems. Meets equivalent of one hour per week for each credit hour value. May be taken more than once for credit. One, two, or three credit hours. Offered on demand.

CNMG 4100, 4200, 4300 Independent Study
Prerequisite: junior standing. Topic and method of procedure must have approval of the supervising faculty member. Four to six hours per week of work on the project for each hour of credit earned. The exact hourly commitment per week and credit hour value depends on the nature of the project and is agreed on in advance by the student and the instructor. With approval, may be repeated for up to six hours of credit. One, two, or three credit hours. Offered on demand.
Chairperson:
Tebbetts, George, P.E., Associate Professor

Professors:
Bakr, Mamdouh M., P.E.
Patangia, H.C.
Menhart, Steve
Midturi, Swaminadham

Associate Professors:
Luneau, M. David Jr., P.E.
Pidugu, Srikanth, P.E.
Zhang, Wenle

Instructor:
Tschumi, Pete III

Adjunct Instructors:
Bell, Pat
Chapman, Steve
Poff, Marie
Gilbert, Ben
Hendricks, Chris
Hite, Jon
Ibarra, Tim
Mastro, Paul
Tomany, Armand

Engineering technology emphasizes hands on learning and the practical aspects of engineering. It stresses the understanding and application of established engineering principles to the design, fabrication, and testing of electronic and mechanical products and systems. Engineering technology is a creative blend of the physical sciences, engineering knowledge, methods, and technical skills.

Engineering technology courses emphasize the application of engineering principles to analyze and solve practical engineering problems. Many courses have laboratories and laboratory experience is an integral part of the learning process in the program.

The primary goal of the department is to provide integrated educational opportunities to students whose technological interests and aptitudes are application-oriented. The department fosters applied research, creative design, and service activities which involve students and faculty. Graduates of the department programs are highly sought after, and are recognized by industry for their practical problem solving skills.

Programs and Areas of Specialization

The department offers Associate of Science and Bachelor of Science degrees in Electronics and Computer Engineering Technology and Mechanical Engineering Technology. The B.S. degrees in Engineering Technology require four years of full-time study and do not require a minor. The AS degrees require two years of full-time study.

The department also offers a Bachelor of Applied Technology with options in Industrial Computing and Manufacturing Management. This program is intended for graduates of the two-year Associate of Applied Science degree programs.

The department also offers minors in Engineering Technology and Computer Integrated Manufacturing.

Admission to the Programs

The minimum requirement for admission is that students are eligible to enroll in MATH 1302 and RHET 1311. As soon as students meet those requirements, it is important that they declare a major and be assigned a faculty advisor in order to graduate in a timely manner.

Students intending to major in Engineering Technology may be advised by department faculty advisors before meeting the Department’s minimum requirements.

Scholarships, Co-op, Internship, and Other Employment Opportunities

The department offers a limited number of merit scholarships for continuing students in each program area. Scholarships are offered on the basis of academic record. Cooperative experience (Co-op) and internship arrangements with local industries are also available. The objective is to provide work experience to students within the discipline while allowing the flexibility to pursue a reduced course load. The department makes an effort to accommodate persons with relevant industrial experience or previous college work. Such a student can apply with appropriate support materials to receive academic credit. The number of hours and course equivalencies are to be decided by a faculty advisor and the chair of the department. Credit for some courses may also be earned by departmental examination. The department and the university provide assistance in job placement. Graduates are well accepted by industry because of their knowledge of applied engineering and practical problem solving skills.

Engineering Technology Program Educational Objectives (PEOs)

The Electronics and Computer Engineering Technology and Mechanical Engineering Technology degrees, consistent with the mission of the university and college, provide holistic educational training in engineering technology specialties and prepare the graduates for entry-level positions in industry. The content, depth, and structure of the engineering technology curricula are continually updated and improved based on inputs from the faculty, student body, university and college administration, and industry representatives, so that it can serve the changing needs of its constituencies.
The following program educational objectives have been established for the ECET graduates:

1. The graduates will possess the skills necessary to be productive in their first position in the field and to have successful careers.
2. The graduates will be enabled to achieve increasing levels of leadership and responsibility throughout their careers.
3. The graduates will be enabled to engage in life-long learning.
4. The graduates will demonstrate a respect for diversity and a commitment to professional ethics.

The following program educational objectives have been established for MET graduates:

1. The graduates will possess the analytical & technical skills necessary to be productive early in their first position in the field and to have successful careers in the engineering environment.
2. The graduates will be enabled to achieve increasing levels of leadership and responsibility throughout their careers.
3. The graduates will be enabled to engage in life-long learning and continued professional development.
4. The graduates will possess a commitment to professional ethics and a respect for diversity in the workplace.
5. The graduates will appreciate the importance of discovery and engage in the development of creative solutions contributing to the well-being and economic development of society.

Engineering Technology Student Outcomes

The Student Outcomes for the Mechanical Engineering Technology program and for the Electronics and Computer Engineering Technology can be found on the Engineering Technology web pages at the following address: http://ualr.edu/engineeringtechnology/assessment/

Student Professional Societies

Several opportunities exist for students to interact with peers through student chapters of professional societies such as the Institute of Electrical and Electronics Engineers (IEEE), American Society of Mechanical Engineers (ASME), Society for Women Engineers (SWE), and Tau Alpha Pi, the honor society of Engineering Technology. The Industrial Advisory Council of Engineering Technology consists of members from local industry and provides excellent interaction with industry for students and faculty.

Minor in Engineering Technology

The minor in Engineering Technology is available to all UALR students who want to learn about general principles or specific topics in the fields of Mechanical or Electronics & Computer Engineering Technology. Students are required to take eighteen credit hours of approved ETME and/or ECET courses. Students interested should contact an advisor in the Department.

Minor in Computer Integrated Manufacturing

The minor in computer integrated manufacturing requires at least 22 credit hours. The program must include ETME 1300, 2317, 2117, 3328, 3312, 3330, and 4385, and three hours of an approved technical elective.

FAA’s Airway Facilities Collegiate Training

The electronics and computer engineering technology program is an approved site for the Federal Aviation Administration’s (FAA) Airway Facilities Collegiate Training Initiative (AF-CTI). Students selected to participate in the FAA initiative pursue the associate degree program in electronics and computer engineering technology and are required to pass a Basic Electronics Screening Tool (BEST) Test before being hired. For more details, contact the program coordinator of electronics and computer engineering technology.

Bachelor of Applied Technology

The Bachelor of Applied Technology (B.A.T.) degree with options in Industrial Computing and Manufacturing Management serves students, who have an Associate of Applied Science (A.A.S.) degree. The goal of the program is to provide these students with a path to a baccalaureate degree that utilizes the work they have done in the A.A.S. degree. The program accepts 60 credit hours of transfer credit from the A.A.S. towards the B.A.T. Of the 60 credit hours of transfer work, courses meeting core requirements will be used for the UALR core courses and the remaining will be used as technical electives.

The number of hours taken at UALR will vary with how closely the student’s A.A.S. degree matches the prerequisite needs of the UALR courses.

B.A.T. Admission Requirements

Completion of A.A.S. degree from any 2-year college is required. For more information about the details of course transfers for the B.A.T. in Industrial Computing, contact Pete Tschumi (hatschumi@ualr.edu) of the ECET program. For more information about the details of course transfers for the B.A.T. in Manufacturing Management, contact Dr. Swaminadham Midturi (sxmidturi@ualr.edu) of the ETME program.

Bachelor of Applied Technology in Industrial Computing

Transition Semester (13 Hours)

ECET 2352 Introduction to Digital Systems
ECET 2152 Introductory Digital Laboratory
ECET 2150 Microprocessor Fundamentals
CPSC 1375 Programming I
CPSC 1175 Introduction to Computer Science Laboratory
ECET 3405 Electronic Devices I

First Semester (14 Hours)

CPSC 2376 Programming II
ECET 3406 Electronic Devices II
ECET 3350 Microprocessor Systems
ECET 4407 Digital System Design

Second Semester (13 Hours)

ECET 4450 Embedded Systems
ECET 3360 Data Acquisition and Sensors
RHET 3316 Writing for the Workplace
or RHET 3326 Technical Writing
or MGMT 3380 Business Communication
SPCH 1300 Speech Communication
Third Semester (13 Hours)
ECET 4351 System Design
ECET 4304 Industrial Controls
General Electives
Fine Arts/Humanities (Satisfies remaining 5-6 hours core Fine Arts/Humanities)
ECON 3301 Survey of Economics

Fourth Semester (15 Hours)
ECET 4370 Senior Design Project
General Elective
Upper Level Humanities, Arts, or Social Sciences
HIST 1311 History of Civilization I
or HIST 1312 History of Civilization II
IFSC 2200 Ethics in the Profession (Satisfies part of 5-6 hours core Fine Arts/Humanities)

Bachelor of Applied Technology in Manufacturing Management

First Semester (16 Hours)
ETME 3312 Production Systems
ETME 3318 Industrial and Environmental Safety
CHEM 1400 Fundamental Chemistry I
ECON 3301 Survey of Economics
SPCH 1300 Speech Communication

Second Semester (15 Hours)
ETME 3361 Cost Analysis and Estimation
ETME 3328 Computer Aided Manufacturing (CAM)
ETME 3322 Project Management
RHET 3326 Technical Writing
UL Core Communications, Humanities, Arts, or Social Science (with advisor approval)

Third Semester (16 Hours)
ETME 3324 Plastics and Composites
MGMT 3300 Organizational Behavior and Management
ECET 1404 Circuit Analysis I
ETME 3319 Plant Layout
IFSC 2200 Ethics in the Profession (Satisfies part of 5-6 hours core Fine Arts/Humanities)

Fourth Semester (17 Hours)
ETME 3300 Independent Study in Quality Control
MGMT 3302 Organizational Theory
ECET 3308 Robotics and Programmable Logic Controllers (PLCs)
ETME 4386 Maintenance Management
Fine Arts/Humanities (Satisfies remaining 5-6 hours core Fine Arts/Humanities)
HIST 1311 History of Civilization I
or HIST 1312 History of Civilization II

Electronics and Computer Engineering Technology Program
Professor H. C. Patangia, Coordinator.

The field of electronics and computer engineering technology extends over a wide spectrum of modern applications where knowledge of both electronics and computer hardware/software are equally important. It is essential for many modern industries that graduates work comfortably across the boundaries of both electronics and computers. This curriculum offers a single, unified bachelor’s degree program in electronics and computer engineering technology to prepare students to take on the technological challenges of the 21st century. It provides a strong and comprehensive foundation in both areas, and technical electives are available for students to concentrate in either or both fields depending on their interests.

The curriculum requires that students develop a strong background in mathematics, science, and communication skills. In addition, students must master a progressively involved sequence of technical courses, which instill a knowledge of theory, analysis, and practical design. The heavy laboratory emphasis with modern and industry standard equipment provides extensive hands-on experience in a variety of fields including analog and digital electronics, computer networks and systems, microprocessors, telecommunications, embedded systems, robotics, PLCs, industrial control, and signal processing.

The electronics and computer engineering technology program enjoys strong support of the industrial community, and an industrial program advisory board provides periodic input to make changes in program offerings to reflect the changing needs of industries. Local companies provide cooperative education assignments for students to receive meaningful industrial experience while earning both academic credit and income to defray their educational expenses.

The bachelor’s and associate’s degree programs in electronics and computer engineering technology are both accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Associate of Science Degree

This degree requires two years of study of electronics, computers, science, mathematics, and general academics to prepare students for employment as electronics technicians. Graduates of the program can also apply their credits toward the bachelor of science degree in electronics and computer engineering technology. Two additional years of study are required to meet the requirements for the baccalaureate degree.

Bachelor of Science Degree

The baccalaureate degree program requires the students to complete two additional years beyond the associate of science curriculum. Students receive greater depth and breadth of knowledge in the technical field and more mathematics, humanities, and social science courses are included. A number of technical electives are allowed in the curriculum, and students choose the electives to match their career objectives. No minor is required for the degree.
# Associate of Science in Electronics and Computer Engineering Technology Curriculum

## First Semester (15 hours)
- ECET 1302 Introductory Experience in Technology and Computers
- RHET 1311 Composition I
- MATH 1302 College Algebra
- HIST 2311, 2312 American History
- or POLS 1310 American National Government
- SPCH 1300 Speech Communication

## Second Semester (17 hours)
- RHET 1312 Composition II
- MATH 1303 Trigonometry
- ECET 1404 Circuit Analysis I
- IFSC 1202 Intro to Object Oriented Technology
- ETME 1300 Computer Graphics
- IFSC 2200 Ethics in the Profession

## Third Semester (17 hours)
- MATH 1311 Applied Calculus I
- PHYS 1321 Elementary Physics I
- PHYS 1121 Elementary Physics I Laboratory
- ECET 2300 Numerical Methods for Technologists
- ECET 2305 Circuit Analysis II
- ECET 2105 Circuits and Simulation Laboratory
- RHET 3316 Writing for the Workplace
- or RHET 3326 Technical Writing
- or MGMT 3380 Business Communication

## Fourth Semester (17 hours)
- ECET 2352 Introduction to Digital Systems
- ECET 2152 Introductory Digital Laboratory
- PHYS 1322 Elementary Physics II
- PHYS 1122 Elementary Physics II Laboratory
- ECET 2150 Microprocessor Fundamentals
- ECET 2169 Sophomore Design Project
- ECET 3308 Robotics and PLCs
- ECET 3405 Electronic Devices I

## Bachelor of Science in Electronics and Computer Engineering Technology

(Two Year Program Following the Associate Degree)

## Fifth Semester (17 hours)
- CPSC 2376 Advanced Computer Programming
- MATH 1312 Applied Calculus II
- ECET 3406 Electronic Devices II
- ETME 3312 Production Systems
- ECET 4407 Digital System Design

## Sixth Semester (14 hours)
- ECET 4351 System Design
- ECET 4304 Industrial Controls
- ETME 4370 Senior Design
- Approved Technical Elective (3 hours)

## Seventh Semester (16 hours)
- ECET 4306 Data and Computer Communications
- Approved Technical Elective (3 hours)
- Upper Level Humanities, Arts, or Social Sciences (3 hours)
- HIST 1311 History of Civilization I
- or HIST 1312 History of Civilization II

## Eighth Semester (15 hours)
- ECET 4351 System Design
- ECET 4304 Industrial Controls
- ETME 4370 Senior Design
- Approved Technical Elective (3 hours)
- Upper Level Humanities, Arts, or Social Sciences (3 hours)

## Mechanical Engineering Technology Program

Associate Professor Srikanth Pidugu, Coordinator.

Leadership in corporate America is projected to come from the ranks of technologists who have the breadth of knowledge of design, manufacturing technology, and management skills. UALR's mechanical engineering technology program provides a strong and comprehensive foundation in these areas and introduces to students the ideas of fabrication processes, management of people and projects, and cost and quality control. The program focuses on fundamental concepts of statics, dynamics, mechanics of materials, and computer two- and three-dimensional graphics of components. The degree program emphasizes product development, design, manufacturing, design of mechanical systems such as thermal power systems, heating, ventilating and air conditioning, and addresses the area of plastics and composites.

The program prepares students for entry-level positions in a variety of career areas in product design, testing, manufacturing, and in plant design and operation. Technical knowledge in the mechanical field is based upon a broad foundation in mathematics, science, and applied science. The program emphasizes applications and extensive hands-on experience in addition to theoretical concepts. In addition to the traditional approach to mechanical design and manufacturing, the program emphasizes computer applications such as computer-aided manufacturing, computer-aided engineering, data acquisition and sensors, robotics, and programmable logic controllers.

UALR's mechanical engineering technology program enjoys strong support from the industrial community and has a successful cooperative education program with a number of local industries. The cooperative education program allows students to practice in industry, gaining early experience while earning academic credit and income to help with their educational expenses. Students may enroll in the co-op program beginning in their junior year.

The department offers both a two-year associate and four-year bachelor's degree program. Both are accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology (ABET).

## Minor in Computer Integrated Manufacturing

**Required Courses**
- ETME 1300 Computer Graphics
- ETME 2317 Manufacturing Processes
- ETME 2117 Manufacturing Processes Laboratory
- ETME 3312 Production Systems
- ETME 3328 Computer Aided Manufacturing (CAM)
- ETME 3330 Quality Control
- ETME 4385 Robotics and Automation
- Approved technical elective (3 hours)
Associate of Science Degree

The associate of science is a two-year degree program which provides students with the background and skill for supporting level positions in the mechanical and manufacturing fields. These include computer graphics, computer aided manufacturing and CNC programming, fluid power, technical sales, and plant maintenance.

The curriculum requires students to take courses in mechanical, manufacturing, and electronics and computer engineering technology in addition to mathematics, science, and general education. Students must complete the associate degree program before they are allowed to enroll in the baccalaureate program.

The associate degree in mechanical engineering technology majors may take only up to nine credit hours of junior and senior level courses in the program. Associate degree graduates may transfer their credits toward the bachelor’s degree in mechanical engineering technology.

ASSOCIATE OF SCIENCE IN MECHANICAL ENGINEERING TECHNOLOGY CURRICULUM

First Semester (15 hours)
- CPSC 1370 Computer Literacy or MGMT 1310 Fund of Info. Tech.
- ECET 1302 Introductory Experience in Technology and Computers
- MATH 1302 College Algebra
- RHET 1311 Composition I
- HIST 2311, 2312 American History
- or POLS 1310 American National Government
- SPCH 1300 Speech Communication

Second Semester (15 hours)
- ETME 1300 Computer Graphics
- ECET 1404 Circuit Analysis I
- RHET 1312 Composition II
- MATH 1303 Trigonometry
- IFSC 2200 Ethics in the Profession

Third Semester (16 hours)
- ETME 2303 Computer Aided Design
- ETME 2302 Properties of Materials
- ETME 3317 Statics and Dynamics
- PHYS 1321 Elementary Physics I
- PHYS 1121 Elementary Physics Lab I
- MATH 1311 Applied Calculus I

Fourth Semester (17 hours)
- ETME 2333 Advanced Computer-Aided Design
- ECET 3308 Robotics and PLCs
- ETME 2317 Manufacturing Processes
- ETME 2117 Manufacturing Processes Lab
- ETME 2320 Fluid Power
- PHYS 1322 Elementary Physics II
- PHYS 1122 Elementary Physics II Laboratory

Bachelor of Science in Mechanical Engineering Technology

The baccalaureate degree program requires the students to complete two additional years beyond the associate of science curriculum. No minor is required for the degree.

Students receive greater depth and breadth of knowledge in the mechanical field, and take additional courses in mathematics, science, humanities, and social science. Students choose technical electives to meet their career goals.

The bachelor of science curriculum requires completion of the associate degree curriculum detailed previously and the requirements detailed in the chart above.

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING TECHNOLOGY

(Two Year Program Following the Associate Degree)

Fifth Semester (15 hours)
- ETME 3312 Production Systems
- ETME 3303 Applied Thermal Science
- CHEM 1402 General Chemistry I
- MATH 1312 Applied Calculus II
- IFSC 1202 Intro to Object Oriented Technology

Sixth Semester (18 hours)
- ETME 3361 Cost Analysis and Estimation
- ETME 3315 Thermal Systems Design
- ETME 3328 Computer Aided Manufacturing
- ETME 3301 Applied Mechanics of Materials
- RHET 3316 Writing for the Workplace
- or RHET 3326 Technical Writing
- or MGMT 3380 Business Communication
- Fine Arts/Humanities (Satisfies part of 5-6 hours core Fine Arts/ Humanities)

Seventh Semester (16 hours)
- ETME 4317 Machine Design
- ETME 4321 Computer Aided Engineering
- ETME 4187 Senior Project I
- ETME 3324 Plastics & Composites
- HIST 1311 History of Civilization I
- or HIST 1312 History of Civilization II
- ETME 3311 Mechanical Instrumentation

Eighth Semester (15 hours)
- ETME 4387 Senior Project II
- ETME 3330 Quality Control
- Technical Elective
  (Approved technical electives include: ETME 3191, 3291, 3305, 3318, 3322, and 4385.)
  Individuals, cultures, and societies core curriculum requirement
- Upper-Level Humanities, Arts, or Social Sciences

Courses in Electronics and Computer Engineering Technology

ECET 1302 Introductory Experience in Technology and Computers

A project-based experiential learning course to modern technology through hands-on laboratory activities, team work, and cooperative learning, and problem solving. Introduction to design process and reverse engineering. Five hours of integrated lecture lab. Three credit hours.

ECET 1404 Circuit Analysis I

Prerequisites: a grade of C or greater in ECET 1302 or consent of instructor, and MATH 1302. A study of DC (direct current) circuit analysis techniques using resistors, inductors, and capacitors as circuit elements. Network theorems and introduction to AC analysis. Three hours lecture and three hours lab. Four credit hours.

ECET 2100 Methods of Engineering Computation

Corequisite: MATH 1303. Use of microcomputers for technical data analysis, manipulation, and reports. Application of the computer to engineering problem solving. One hour lecture and one hour lab. One credit hour.

ECET 2105 Circuits and Simulation Laboratory

Corequisite: ECET 2305. Laboratory experiments to supplement classroom instruction in ECET 2305. Introduction to electronics simulation software and its applications to laboratory exercises. Three hours lab. One credit hour.

ECET 2150 Microprocessor Fundamentals

Prerequisites: a grade of C or greater in ECET 1404, sophomore standing. Study includes number systems, basic types of instructions and addressing modes, and an overview of the functional organization inside a microprocessor. One hour lecture. One credit hour.
ECET 2152 Introductory Digital Laboratory
Corequisite: ECET 2352. Lab exercises to provide practical knowledge of logic devices and their applications. One three-hour lab. One credit hour.

ECET 2169 Sophomore Design Project
Prerequisites: sophomore standing. Schematic layout through CAD; PCB design to include SMT components; complete fabrication with mechanical consideration, and casing. Both written report and oral presentation are required. Three hours lab. One credit hour.

ECET 2191 Cooperative Education
Prerequisites: Sophomore standing in engineering technology and approval of department’s chairperson; cumulative GPA of 2.50; minimum GPA of 2.30 for previous semester. Industrial experience under supervision of faculty advisor to supplement course work. Students who take this course may not take 2291. Requires at least 240 contact hours on the job. One credit hour.

ECET 2291 Cooperative Education
Prerequisites: Sophomore standing and approval of department’s chairperson; cumulative GPA of 2.50; minimum GPA of 2.30 for previous semester. Industrial experience under supervision of advisor to supplement course work. Students who take this course may not take 2191. Requires at least 480 contact hours on the job. Two credit hours.

ECET 2300 Numerical Methods for Technologists
Prerequisite: IFSC 1202 or equivalent. Corequisite: MATH 1311. An introductory course in symbolic language programming with application to engineering problems. Related material in numerical methods of solution is presented. Five hours of combined lecture and laboratory. Three credit hours.

ECET 2305 Circuit Analysis II
Prerequisites: grade of C or greater in ECET 1404, MATH 1303. A study of the steady-state response of AC electrical circuits. The applications of the concepts of inductive reactance, capacitive reactance, and complex impedance to the solutions of AC circuits, series and parallel resonance, and power. Three hours lecture. Three credit hours.

ECET 2330 Electronics and Controls
Prerequisite: a grade of C or greater in ECET 2405. Intended for majors other than electronics and computer engineering technology. Fundamental elements of power electronics needed to understand the operation and maintenance of electronic equipment. Introduction of power semiconductor devices including diodes and thyristors. The electronic control of motors, including variable frequency drives. Controlling the operation of equipment and processes with programmable logic controllers. Two hours lecture, three hours laboratory. Three credit hours.

ECET 2352 Introduction to Digital Systems
Prerequisite: a grade of C or greater in ECET 1404 or equivalent. Introduction to digital circuits and systems. Number systems, Boolean algebra, and applications of basic logic gates; exercises in analysis and design of combinational and sequential logic circuits, including encoders, decoders, multiplexers, flip-flops, registers, and counters. Microprocessor architecture software and programming. Three hours lecture. Three credit hours.

ECET 2405 Electrical Technology
Prerequisite: a grade of C or greater in MATH 1303. Corequisites: PHYS 1322 and 1122. An introductory course in electrical technology for majors other than electronics and computer engineering technology. A review of basic quantities including current, voltage, power, and energy. An introduction to machines and transformers, including direct current motors, induction motors, stepper motors, synchronous generators, and transformers. Three hours lecture, three hours lab. Four credit hours.

ECET 3191 Cooperative Education
Prerequisites: junior standing in engineering technology and approval of department’s chairperson; cumulative GPA of 2.50, minimum GPA of 2.30 for previous semester. Industrial experience under supervision of advisor to supplement course work. Students who take this course may not take 3291. Requires at least 240 contact hours on the job. One credit hour.

ECET 3291 Cooperative Education
Prerequisites: Junior standing in engineering technology and approval of chairperson; cumulative GPA of 2.50; minimum GPA of 2.30 for previous semester. Work experience related to student objectives under supervision of advisor. Students who take this course may not take 3191. Requires at least 480 contact hours on the job. Two credit hours.

ECET 3300 Independent Study
Prerequisite: consent of instructor. Study of assigned topics chosen to develop investigative, analytical, research, or professional skills related to engineering. The student is expected to spend 8 to 10 hours per week on the project. The exact hourly commitment depends on the complexity of the project and is agreed on in advance by the student and the instructor. Three credit hours.

ECET 3308 Robotics and Programmable Logic Controllers (PLCs)
Prerequisite: grade of C or greater in ECET 1404 or 2405. A study of operation of PLC’s, including ladder logic programming and interfacing to industrial-type equipment, such as motors. Programming topics include bit addressing, timers, counters, and switches. The application of PLC’s for robotic control will be examined. Two hours lecture, three hours lab. Three credit hours.

ECET 3316 Power Systems and Equipment
Prerequisites: grades of C or greater in ECET 2303, MATH 1311. Basic principles of AC power systems analysis, with emphasis on three-phase systems. Load and fault analysis and economic operation. Major equipment items, including motors, generators, transformers, and switching and control equipment. Two hours lecture, two hours lab and recitation. Three credit hours.

ECET 3350 Microprocessor Systems
Prerequisite: a grade of C or greater in CPSC 2382 or ECET 2150. Survey of addressing modes and instructions. Some hardware is introduced and electronic signals are related to software statements. Three hours lecture. Three credit hours.

ECET 3360 Data Acquisition and Sensors
Prerequisite: grades of C or greater in ECET 2300, 2352, and 3406; or consent of instructor. A practice-oriented course emphasizes the use of sensors in instrumentation and control and provides an understanding of the techniques of acquisition and manipulation of experimental and sensory data using computer hardware and software to build a coordinated and optimal automated system. Principles of process control using personal computers to provide an inexpensive solution for isolated or small-scale industrial process control are also discussed. Two hours lecture, three hours lab. Three credit hours.

ECET 3405 Electrical Devices I
Prerequisites: grades of C or greater in ECET 2305 and 2105. A study of the characteristics and applications of electronic elements including diodes, BJTs, and op-amps. Includes load lines, biasing techniques, single and multistage signal amplifiers, power amplifiers, and transistor switching characteristics. Laboratory exercise also includes computer simulation. Three hours lecture, three hours lab. Four credit hours.

ECET 3406 Electronic Devices II
Prerequisite: a grade of C or greater in ECET 3405. A detailed study of the operational amplifier, including gain considerations and frequency response. Selected applications of the op-amp to instrumentation, control, and active filters; computer-aided analysis is fully integrated into all topics. Other topics include oscillators and timing circuits. Three hours lecture, three hours lab. Four credit hours.

ECET 3409 Applied Transform Methods
Prerequisites: grades of C or greater in ECET 3406 and MATH 1312. Laplace transform method applied to network analysis, filters, and feedback systems. Fourier series and Fourier transform techniques with application to communication signals. Introduction to Z transform for digital signal processing. The laboratory projects include computer simulation using Matlab. Three hours lecture, three hours lab. Four credit hours.

ECET 4199 Special Technical Topics
Prerequisite: consent of instructor. Based on relevance of subject matter to student career goals. Designed to meet special needs of students or industry to cover application of technology to specific industrial problems. Meets equivalent of one hour. One credit hour.

ECET 4304 Industrial Controls
Prerequisites: a grade of C or greater in ECET 4407. A detailed study of industrial controls based around microcontrollers. Practical applications are emphasized. Topics include interface devices, such as opto-isolators and solid state relays. Two hours lecture, three hours lab. Three credit hours.
ECET 4306 Data and Computer Communications
Prerequisite: a grade of C or greater in ECET 3409. Discusses principles and practices in data communications with emphasis on the hardware aspects of data communication. Topics include transmission, encoding, decoding, data interfacing, error detection and correction, link control, networking and protocols. Internet networking over the internet. Three hours of lecture. Three credit hours.

ECET 4309 Applied Signal Processing
Prerequisite: grade of C or greater in ECET 3409. A hands-on experience to digital signal processing through laboratory exercises in a computer environment. Sampling theorem, discrete-time signals and systems, DFT, DFT, and digital filters. Two hours of lecture and two hours lab. Three credit hours.

ECET 4351 System Design
Prerequisites: grades of C or greater in ECET 3409 and 4450, or consent of instructor. Methods of approaching design problems, software control of hardware, modeling of applications, hardware/software trade-offs in the design process. Students work in teams to solve a substantive design problem. The course integrates at the system level the hardware/software knowledge of the electronics and computer engineering technology major. Three hours lecture. Three credit hours.

ECET 4353 Optical Electronic Devices and Systems
Prerequisites: grades of C or greater in ECET 3406 and 4407. Applications of optical devices to communications, robotics, and automated manufacturing. Two hours lecture, two hours lab. Three credit hours.

ECET 4354 Computer Hardware Architecture
Prerequisites: grades of C or greater in ECET 3350, 4407. Study of the various hardware designs and their relationship to architecture. Includes overview of mainframe, supercomputers, and multicomputers. Three hours lecture. Three credit hours.

ECET 4362 Real-Time Systems
Prerequisites: grades of C or greater in ECET 3350 and CPSC 2376 or equivalents. Real-time specification and design techniques, real-time kernels, intertask communication and synchronization, real-time memory management, system performance analysis and optimization. Three hours lecture. Three credit hours.

ECET 4363 Network Technology and Management
Prerequisite: grade of C or greater in ECET 4306. A continuation of the studies of the principles and practices in data communication and includes topics such as switches and switching fabric, frame relay, ATM, and emerging technologies. Protocols and techniques for monitoring and managing computer networks, and computer security issues are discussed. Two hours lecture and two hours lab. Three credit hours.

ECET 4370 Senior Design Project
Prerequisite: grade of C or greater in ECET 4351. Students work independently with a faculty mentor on a design/research problem. The developed through industry collaboration, faculty research, or at the student's own initiative through literature search, The project requires electronics and computer engineering technology faculty approval, formal oral and written presentation, and demonstration of the project. Students meet with the mentor weekly to discuss their designs. Five hours lab. Three credit hours.

ECET 4399 Special Technical Topics III
Prerequisite: consent of instructor based on relevance of subject to student career goals. Designed to meet special needs of students or industry to cover application of technology to specific industrial problems. Meets equivalent of three hours. Three credit hours.

ECET 4407 Digital System Design
Prerequisites: grades of C or greater in ECET 2300, 2352, 2152, and 3405. Advanced concepts in digital system design to include programmable devices, and state machines using HDL. Laboratory projects include computer simulation. Three hours lecture, three hours lab. Four credit hours.

ECET 4450 Embedded Systems
Prerequisite: grade of C or greater in ECET 3350 and 4407. Techniques for interfacing micros to outside devices. Detailed analysis of bus standards, serial and parallel input/output to peripherals. Laboratory includes the application of interfacing techniques to build a microcomputer and interface it to outside devices. Three hours lecture, three hours lab. Four credit hours.

ECET 4479 Communication Systems
Prerequisites: grades of C or greater in ECET 3406 and 3409. Spectral analysis of signals; noise; linear modulation and demodulation; AM, SSB, angle modulation and demodulation; phase locked loops, and digital communication techniques. Three hours lecture, three hours lab. Four credit hours.

ECET 4480 Digital Communication
Prerequisite: a grade of C or greater in ECET 4479. Advanced study of techniques and hardware employed in digital, microwave, satellite, and fiber optic communications. Three hours lecture, three hours lab. Four credit hours.

Courses in Mechanical Engineering Technology

ETME 1110 Introduction to Mechanical Engineering Technology
Review of educational goals, role, and practice of mechanical engineering technology. Career path in design, manufacturing planning, plant engineering, and plant management. Planning educational and experience goals, including cooperative education; licensing and certification. One hour lecture. One credit hour.

ETME 1300 Computer Graphics
Study of graphics and the types of engineering drawings used in design. Sketching and computer generated drawings. Computer generated design tools are used to create the various types of views needed for design and documentation. Two hours lecture and three hours lab. Three credit hours.

ETME 2117 Manufacturing Processes Laboratory
Prerequisite or corequisite: ETME 2317. Introduction to machine shop equipment and processes; metal fabricating applications; including metal cutting, such as turning, drilling, milling; welding, and measurement and inspection. Course project and the application of Ethics and safety in design and manufacturing. One three-hour lab, One credit hour.

ETME 2191 Cooperative Education
Prerequisites: sophomore standing in engineering technology and approval of department's chairperson; cumulative GPA of 2.50; minimum GPA of 2.30 for previous semester. Industrial expertise experience under supervision of faculty advisor to supplement course work. Students who take this course may not take 2291. Requires at least 240 contact hours on the job. One credit hour.

ETME 2291 Cooperative Education
Prerequisites: sophomore standing and approval of department's chairperson; cumulative GPA of 2.50; minimum GPA of 2.30 for previous semester. Industrial expertise experience under supervision of faculty advisor to supplement course work. Students who take this course may not take 2191. Requires at least 480 contact hours on the job. Two credit hours.

ETME 2302 Properties of Materials
Physical structure of metals, properties, testing, phase diagrams, and applications. Ferrous metals, metal treatment, nonferrous metals, corrosion, plastics, other engineering materials and applications. Two hours lecture, two hours lab. Three credit hours.

ETME 2303 Computer-Aided Design (CAD)
Prerequisites: a grade of C or greater in ETME 1300 and basic computer skills, or consent of instructor. A study of 2D and 3D computer aided design software used in industry. Detailed and working drawings, and design documentation using CAD. Importing and exporting CAD data is covered as well as various methods of output. Introduction to 3D modeling. Two hours lecture, three hours lab. Three credit hours.

ETME 2310 Applied Statics
Corequisite: MATH 1311. An analysis of force systems applied to rigid bodies at rest. Application of principles on computation of reactions, shears, moments, and forces for simple structures. Centroids and moments of inertia are included. Two hours lecture, two hours lab. Three credit hours.

ETME 2317 Manufacturing Processes
Traditional manufacturing processes such as casting, forging, cold working; metal removal processes such as turning, milling, drilling, finishing processes, metal joining, and plastics. Manufacturing process laboratory course is available. Three hours lecture. Three credit hours.
ETME 2320 Fluid Mechanics and Power
Prerequisite: a grade of C or greater in MATH 1303. Hydraulics and pneumatics; the flow of water, air, and oil; calibration of metering devices; pipe friction; elementary hydraulic tests; friction and energy loss; and devices for making fluid measurements. Two hours lecture, two hours lab. Three credit hours.

ETME 2333 Advanced Computer-Aided Design
Prerequisites: a grade of C or greater in ETME 2303, or consent of instructor. Graphic design process using an interactive computer-aided design system. Includes sophisticated functions beyond two-dimensional shape and size description and three-dimensional capabilities of CAD/CAM systems in advanced design situations. Calculation and analysis programs are used to improve the 'design.' Students work on design problems related to their chosen field using the CAD system. Two hours lecture, three hours lab. Three credit hours.

ETME 3191 Cooperative Education
Prerequisites: junior standing in engineering technology and approval of department's chairperson; cumulative GPA of 2.50, minimum GPA of 2.30 for previous semester. Industrial experience under supervision of advisor to supplement course work. Students who take this course may not take 3291. Requires at least 240 contact hours on the job. One credit hour.

ETME 3291 Cooperative Education
Prerequisites: junior standing in engineering technology and approval of chairperson; cumulative GPA of 2.50; minimum GPA of 2.30 for previous semester. Work experience related to student objectives under supervision of advisor. Students who take this course may not take 3191. Requires at least 480 contact hours on the job. Two credit hours.

ETME 3300 Independent Study
Prerequisite: consent of instructor. Study of assigned topics chosen to develop investigative, analytical, research, or professional skills related to engineering. The student spends 8 to 10 hours per week on the project. The exact hourly commitment depends on the complexity of the project and is agreed on in advance by the student and the instructor. Three credit hours.

ETME 3301 Applied Mechanics of Materials
Prerequisites: ETME 2302, a grade of C or greater in ETME 3317 or consent of the instructor. Topics include stress and strain, direct and shearing stresses, torsion, bending, deflection, columns, and riveted, bolted, and welded joints. Three hours lecture. Three credit hours.

ETME 3303 Applied Thermal Science
Prerequisites: PHYS 1321 and ETME 2320. Basic thermal properties and heat transfer modes. Theory, operation, and selection of thermal industrial equipment including engines, turbines, boilers, furnaces, and heat exchangers. Two hours lecture, two hours lab. Three credit hours.

ETME 3305 Industrial Energy Utilization
Prerequisites: ETME 2317, 3303, and ECET 3308, or consent of instructor. Study of the efficient utilization of energy in manufacturing and industrial applications. Components of energy conservation program, assessments of existing processes, analysis and application of energy conservation techniques. One hour lecture and five hours lab. Three credit hours.

ETME 3306 Solar Energy Systems
Prerequisite: a grade of C or greater in ETME 3303. Analysis of solar energy systems and methods of determining the capacity and funding requirements of system elements in terms of applications. Two hours lecture, two hours lab. Three credit hours.

ETME 3307 Applied Dynamics
Prerequisite: a grade of C or greater in ETME 2310. Topics include scalar treatment of kinematics and kinetics of particles, rigid bodies in planar motion, Newton's laws, work and energy, impulse and momentum, impact, and vibration. Two hours lecture, two hours lab. Three credit hours.

ETME 3311 Mechanical Instrumentation
Prerequisites: ETME 3301, 3303, ECET 3308, and IFSC 1202, or consent of instructor. Measurement of mechanical phenomena including stress, strain, deflection, temperature, pressure, and flow. Automatic data acquisition and handling. Applications to process monitoring and product testing. Two hours lecture, three hours laboratory. Three credit hours.

ETME 3312 Production Systems
Prerequisites: ETME 2317, ETME 1300, or consent of instructor. Production systems and applications. System planning for products and services. Operational planning, Just-In-Time (JIT), Total Quality Management (TQM), process control, and system management. System analysis and computer simulation. Facility planning. Three hours lecture. Three credit hours.

ETME 3313 Tool Design
Prerequisites: grades of C or greater in ETME 2117, 2317, MATH 1303. Optimum uses of tool function, geometry, design applications, cutting tools, gages, jigs and fixtures, punch press tools, plastic tools, and special production tools for N/C machines. Two hours lecture, three hours lab. Three credit hours.

ETME 3314 Metallurgy Applications
Prerequisite: a grade of C or greater in ETME 2302. Study of the principles relating crystal structure to chemical, physical, and electrical properties of metals and alloys. The testing, heat treating, and engineering applications of ferrous and nonferrous alloys are considered. Three hours lecture. Three credit hours.

ETME 3315 Thermal Systems Design
Prerequisite: ETME 3303. Study of air conditioning, refrigeration, steam, fluid, thermal systems, and heat transfer processes for commercial and industrial applications. Emphasis is on systems design, operation, and component selection and specification. Two hours lecture, two hours lab. Three credit hours.

ETME 3317 Statics and Dynamics
Prerequisite or corequisite: MATH 1311, 1451, or equivalent. Engineering mechanics involving the study of both statics and dynamics. The equilibrium of bodies at rest or moving with constant velocity and bodies that have a change of motion. Three hours of lecture and lab. Two hours of lecture and two hours of lab. Three credit hours.

ETME 3318 Industrial and Environmental Safety
Prerequisites: grades of C or greater in ETME 2117, 2317, or consent of instructor. Need and justification for safety in the workplace. Legal aspects of safety and the OSHA Act. Environmental requirements and emission standards. Scope of human factors and safety management. Planning and implementation of safety measures to control various industrial hazards such as mechanical, electrical, fire, noise, and toxic substances. Three hours lecture. Three credit hours.

ETME 3319 Plant Layout
Prerequisite: a grade of C or greater in ETME 2317. Principles of facilities planning as applied to selection and location of equipment. Batch and continuous flow. Two hours lecture, three hours lab. Three credit hours.

ETME 3322 Project Management
Prerequisite: MATH 1302. Study of project planning and scheduling using the network methods as presented by PERT and CPM. Network planning, solution methods, and practical applications. Probabilistic time estimates, resource leveling, cost optimization, and cost control techniques. Includes application of computer solution methods. Three hours lecture. Three credit hours.

ETME 3323 Materials Handling and Plant Layout
Prerequisite: grade of C or greater in ETME 2317. Production, distribution and service systems, material flow and the role of material handling. Material handling principles, analysis techniques, and equipment planning. Plant layout and design. The course includes the use of various case studies and the application of computer methods. Three hours lecture. Three credit hours.

ETME 3324 Plastics and Composites
Prerequisite: CHEM 1402 or consent of the instructor. Introduction to plastics part design, materials, production methods, tooling, and equipment. Process cost analysis and optimization. Three hours lecture. Three credit hours.

ETME 3328 Computer Aided Manufacturing (CAM)
Prerequisites: grades of C or greater in ETME 2303, 2333, and 2317. A study of the programming standards used in industry to control NC and CNC equipment. G and M codes, as well as specific control commands used in manual program. Computer aided design and manufacturing software to generate part geometry and tool path information. Preparation of final program used by the CNC controllers to machine the designed parts. Two hours lecture, three hours lab. Three credit hours.
ETME 3329 Process Planning
Prerequisites: grades of C or greater in ETME 2117, 2317. Analytical models and techniques as applied to manufacturing processing, cost estimating, tooling, and materials selection. Problems involving manufacturing, planning, and control. Two hours lecture, three hours lab. Three credit hours.

ETME 3330 Quality Control
Prerequisites: grades of C or greater in ETME 2117, 2317; MATH 1302. Statistical foundation for modern quality control. Process control techniques and applications. Process specifications and process capability. Planning and application of acceptance sampling including such plans as the Dodge-Roming, military standards 105 and 414. Computer application problems. Three hours lecture. Three credit hours.

ETME 3361 Cost Analysis and Estimation

ETME 4185 Robotics Laboratory
Prerequisite or corequisite: a grade of C or greater in ETME 4385. Robot set-up and programming using control pendant, programmable controllers, ARMBASIC and AML2 languages. Robot capabilities including positioning accuracy, repeatability, and compliance. Robot manufacturing tasks including sorting, machine loading, and assembly. Vision system and applications. One three-hour lab. One credit hour.

ETME 4187 Senior Project I
Prerequisite: ETME 3301. Corequisite: ETME 4317. Product design/manufacturing cycle. The design process from market research through production and service. Concurrent engineering, design evaluation, and ethics in design and manufacturing. Project selection and planning for the second phase of the senior project to be completed in ETME 4387. One hour lecture, One hour lab. One credit hour.

ETME 4199 Special Technical Topics I
Prerequisite: consent of instructor. Designed to meet special needs of students or industry to cover application of technology to specific industrial problems. Meets equivalent of one hour. One credit hour.

ETME 4309 Production Control
Prerequisite: senior standing. Traditional operations research approach to production control and some of its limitations. Modern role of computer in material requirements planning (MRP), Master scheduling, capacity planning, dispatching, and shop floor control. Forecasting, order quantity planning and inventory management, Just-In-Time production. Three hours lecture. Three credit hours.

ETME 4317 Machine Design
Prerequisite: ETME 3301. Basic procedures of engineering machine design from concept to specifications. Material selection, tolerances, variable loads and stress concentrations, combined stresses, shaft design, couplings, bearings, gears, power transmitting elements, brakes, clutches, and welded joints. Emphasis on a logical procedure for the design of a complete machine, its components, their functions and layout. Two hours lecture, three hours lab. Three credit hours.

ETME 4319 Plant Engineering
Prerequisite: ETME 3315 or consent of instructor. A practicum on the design and operation of mechanical systems for commercial and industrial applications. Thermal processes, waste water, ducts, piping, and other mechanical systems. Plant operation and maintenance. Two hours lecture. Two hours lab. Three credit hours.

ETME 4321 Computer Aided Engineering (CAE)
Prerequisites: ETME 2333, and ETME 3301, or consent of instructor. Advanced computer aided analysis, stress analysis, kinematics, computer simulation, advanced design software and applications, project documentation. Two hours lecture, two hours lab. Three credit hours.

ETME 4383 Method-Time Analysis
Prerequisites: grades of C or better in ETME 2117, 2317; senior standing. Design of work methods; time study, performance rating, work sampling and introduction to predetermined and computerized time-data systems. Applications to incentive plans and measured day work. Participative productivity improvement such as gainsharing and quality circles. Two hours lecture, two hours lab. Three credit hours.

ETME 4384 Die Casting
Prerequisites: grades of C or better in ETME 2317, 2302. Topics include heat flow, dimensional repeatability, metallurgy, molten metal systems, process control, cost estimating, operating the die casting machine, and safety. Two hours lecture, two hours lab. Three credit hours.

ETME 4385 Robotics and Automation
Prerequisites: ETME 3312; knowledge of computer programming or consent of instructor. Industrial robots, types, and method of control and programming. Automation and application to various industrial processes. Human factors considerations. Robot system planning and justification. Two hours lecture, two hours laboratory. Three credit hours.

ETME 4386 Maintenance Management
Planning, organization, measurement, and control of maintenance activities. The planning, acquisition, and control of replacement parts and maintenance of management information systems. Case studies and project work included. Three hours lecture.

ETME 4387 Senior Project II
Prerequisites: ETME 3312, 4317, and 4187, or consent of instructor. Design problems obtained from industry, current applied research, or student’s own initiative are researched in advance, and assigned as senior projects. Problems are defined, analyzed, design solved, and a final report presented. Final reports include design calculations, drawings, production plans, and may, depending on the scope of the project, be demonstrated and tested using a prototype. One hour lecture and three hours lab. Three credit hours.

ETME 4388 Manufacturing Systems Design
Prerequisites: a grade of C or better in ETME 4170, senior standing. Manufacturing problems obtained from actual industrial situations are assigned to senior students. Each problem is analyzed, designed, and presented orally and in a formal written report by the student. Student reports include drawings, manufacturing plans, cost, and schedule and may be demonstrated by a prototype whenever possible. One hour lecture, three hours lab. Three credit hours.

ETME 4395 Technology Internship II
Prerequisites: junior standing in engineering technology, cumulative GPA of 2.50, minimum GPA of 2.30 for previous semester, approval of assignment by advisor. Professional experience related to student’s discipline under supervision of advisor. At least 240 hours of work are required. Three credit hours.

ETME 4399 Special Technical Topics III
Prerequisite: consent of instructor based on relevance of subject to student career goals. Designed to meet special needs of students or industry to cover application of technology to specific industrial problems. Three credit hours.
The information science program combines the techniques of computer science with the knowledge of information management to produce graduates who are qualified for professional positions in the information technology field. Students develop the skills needed for creating more efficient and effective information systems, designing better information products, managing and securing data resources, and dealing with emerging information technologies. Graduates find positions as solution developers, database administrators, network specialists, programmer/systems analysts, and web specialists. The information science experience emphasizes laboratory environments and hands-on projects using appropriate software to aid in understanding the theory. An additional goal of the information science curriculum is to develop communication and team skills of students. For this reason some courses have a writing component evidenced by the use of essays, written reports, and oral presentations. Other courses reinforce the importance of group dynamics through completion of team projects.

Majors and minors available through the Department of Information Science are as follows:

- Bachelor of Science in Information Science
- Bachelor of Science in E-Commerce
- Minor in Bioinformatics
- Minor in Information Technology

**General Information**

**Major in Information Science**

The Bachelor of Science in Information Science requires at least 39 hours of information science and an additional 12 hours of IFSC specialization electives. Courses eligible for specialization elective credit must focus on a specific topic relevant to information systems and therefore are normally upper-level courses in information science, computer science, business, and relevant courses in other areas. A minor is not required for this curriculum.

---

**Bachelor of Science in Information Science**

**EIT Core Requirements (29-30 hours)**

- PSYC 2300 Psychology and the Human Experience should be taken as part of the Social Sciences.
- IFSC 2200 Ethics in the Profession should be taken as part of the Fine Arts/Humanities.

**Required Science and Math Courses (22 hours)**

- MATH 1451 Calculus I
- MATH 1452 Calculus II
- MATH 2310 Discrete Mathematics
- STAT 3352 Applied Statistics I

8 Credits of Technical Sciences Courses with Labs:
Students should choose their 8 credits from a single science discipline (e.g., 8 credits from Biology or 8 credits from Chemistry or 8 credits from Physics).

**Information Science Requirements (39 hours)**

- IFSC 1202 Introduction to Object-oriented Technology
- IFSC 1105 First Year Experience for IFSC/CPSC Major
- IFSC 1310 Internet Technologies
- IFSC 2300 Object-Oriented Technology
- IFSC 2305 Computer Systems
- IFSC 2315 Information System Software
- IFSC 2340 Human Computer Interface
- IFSC 3300 Internet Applications

- IFSC 3315 Applied Networking
- IFSC 3320 Database Concepts
- IFSC 3330 Current Trends in Database Technology
- IFSC 3360 System Analysis and Design
- IFSC 4396 Capstone Project I
- IFSC 4398 Capstone Project II

Information Science Specialization Electives (12 hours)
Additional Requirements (18 hours)
ECON 2301 Survey of Economics
   or ECON 2322 Microeconomics
ACCT 2310 Principles of Accounting
MKTG 3350 Principles of Marketing
MGMT 3300 Organizational Behavior and Management
MGMT 4331 Management of Information Resources
   3 hour Controlled Business Elective

Major in Information Science
Recommended Sequence
First Semester (13 hours)
RHET 1311 Composition I
   IFSC 1202 Introduction to Object-oriented Technology
   IFSC 1105 First Year Experience for IFSC/CPSC Majors
   MATH 1451 Calculus I
   HIST 2311 U.S. History to 1877
   or HIST 2312 U.S. History since 1877
   or POLS 1310 American National Government

Second Semester (16 hours)
RHET 1312 Composition II
   IFSC 2300 Object-Oriented Technology
   IFSC 1310 Internet Technologies
   MATH 1452 Calculus II
   SPCH 1300 Speech Communication

Third Semester (16 hours)
   Technical Science Course with Lab I
   ECON 2301 Survey of Economics
   or ECON 2322 Microeconomics
   PSYC 2300 Psychology and the Human Experience
   IFSC 3300 Internet Applications
   IFSC 2305 Computer Systems

Fourth Semester (16 hours)
   Technical Science Course with Lab II
   MATH 2310 Discrete Mathematics
   IFSC 2340 Human Computer Interface
   IFSC 2315 Information Systems Software
   HIST 1311 History of Civilization I
   or HIST 1312 History of Civilization II

Fifth Semester (17 hours)
   MGMT 3300 Organizational Behavior and Management
   IFSC 3320 Database Concepts
   IFSC 3360 System Analysis and Design
   IFSC 2200 Ethics in the Profession (Satisfies part of 5-6 hours core Fine Arts/Humanities)
   Fine Arts/Humanities (Satisfies remaining 5-6 hours core Fine Arts/Humanities)
   STAT 3352 Applied Statistics I

Sixth Semester (15 hours)
   MKTG 3350 Principles of Marketing
   IFSC 3315 Applied Networking
   IFSC 3330 Current Trends in Database Technology
   RHET 3326 Technical Writing
   or RHET 3316 Writing for the Workplace
   IFSC Specialization Elective I (3 hours)

Seventh Semester (15 hours)
   MGMT 4331 Management of Information Resources
   ACCT 2310 Principles of Accounting I
   IFSC 4396 Capstone Project I
   IFSC Specialization Elective II (3 hours)
   IFSC Specialization Elective III (3 hours)

Eighth Semester (12 hours)
   Controlled Business Elective (3 hours)
   Upper-level humanities core requirement (3 hours)
   IFSC 4398 Capstone Project II
   IFSC Specialization IV (3 hours)

Bioinformatics Program

Bioinformaticists research, develop, and apply computational tools and approaches for analyzing and thus expanding the use of biological, medical, behavioral, and health data. Many of the advances in the life sciences have been made possible through the application of bioinformatics (e.g., the assembly of the human genome). The preponderance of massive amounts of data generated in sequencing labs, microarray facilities, population studies, and ecological analyses provides many opportunities for using information science techniques to manage the data and gain new insights into the knowledge it contains.

The bioinformatics minor at UALR trains students in the areas of information science and biology and prepares them to apply computational techniques to a variety of life science areas. Building upon a student's major in biology, computer science, or information science, students are prepared to work in this exciting, fast-growing, and interdisciplinary field.

Minor in Bioinformatics

For students or professionals who have completed, or are completing an undergraduate major in biology, computer science, or information science, the minor in bioinformatics consists of 18 credit hours. All courses must be completed with a grade of C or greater. Students without a strong and current background in biology or information / computer science may need to complete up to 29 credit hours.

Students should check with the Biology, Chemistry, and Information Science departments regarding appropriate prerequisites and course sequencing for all courses in the minor. Information Science students should select CHEM 1402 and 1403 for their science requirement, thereby meeting the CHEM 2450 prerequisite. For waiver of prerequisite requirements based on demonstrated competencies, contact the Chair of the Information Science Department.
Courses in Bioinformatics (BINF)

**BINF 2345 Introduction to Bioinformatics**
Prerequisites: MATH 1302 and computer literacy or consent of instructor. This course introduces the student to bioinformatics: the application of information science to studies in the life sciences. Through a survey of the basic sciences influencing computational biology and an overview of information science strategies applicable to the life, medical, and health sciences, an interdisciplinary approach to understanding the evolving field of bioinformatics is developed. Two hours of lecture and two hours of laboratory per week. Three credit hours.

**BINF 4445 Bioinformatics Theory and Applications**
Prerequisites: Consent of instructor or the following: BIOL 3300, IFSC 3320, IFSC 2300, and STAT 3352 or equivalents. BINF 2345 is recommended. An overview of concepts central to the study and application of bioinformatics drawing upon the fields of biostatistics, computer and information science, and the life sciences. Dual-listed in the UALR Graduate Catalog as BINF 5445. Three hours of lecture and two hours laboratory per week. Four credit hours.

**Major in E-Commerce**

The Bachelor of Science in E-Commerce is an interdisciplinary degree that blends web/social media technologies, business, and the liberal arts. It draws its curriculum from the existing course catalogs of several colleges:

- Engineering and Information Technology;
- Business;
- Arts, Humanities, and the Social Sciences;
- College of Professional Studies, and
- College of Science and Mathematics.

The degree can be completed either at the UALR Main Campus or at the UALR Benton Learning Center.

Electronic commerce, commonly known as E-commerce, refers to more than just buying and selling products online. It also includes the entire online process of developing, marketing, selling, delivering, servicing and paying for products and services. This includes the placement of media along the various stages of the customer engagement cycle through search engine marketing (SEM), search engine optimization (SEO), banner ads on specific websites, email marketing, mobile device advertising, social media analytics, and Web 2.0 strategies. E-Commerce makes use of innovations in electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange, inventory management systems, and automated data collection systems.

Job opportunities for graduates from this new degree program include Search Engine Optimization Strategist, Social Media or Digital Strategist/Analyst, Blogger, Content Writer, Website Designer, and Web Administrator. These jobs span both the public and private sectors. A minor is not required for this curriculum.

**Bachelor of Science in E-Commerce**

**UALR Core Requirements (44 hours)**

See the Competencies & University Core Curriculum section of this catalog for details on the specific course requirements. Students who place above the MATH 1302 course may take MATH 1342 to satisfy the core math requirement and the pre-business mathematics requirement. Such students will have three semesters' hours of additional E-commerce electives. See a program advisor for more details.

**E-Commerce Requirements (43 hours)**

- IFSC 1105 First Year Experience for IFSC/CPSC Majors
- CPSC 1370 Computer Literacy
- IFAS 2300 Intro to Information Assurance
- ITEC 3610 Intro to Information Technology & Applications
- ITEC 3650 Guided Applications in IT & Industry Processes
- IFSC 4350 Electronic Commerce
- ITEC 4610 Project Development and Portfolio Defense

**E-Commerce Specialization Electives (15 hours)**

**Quantitative Reasoning Requirements (9 hours)**

- MATH 1342 Business Calculus
- STAT 2350 Intro to Statistical Methods
- ECON 3355 Quantitative Analysis

**Business Requirements (24 hours)**

- ACCT 2310 Principles of Accounting I
- ACCT 2330 Principles of Accounting II
- ECON 2322 Principles of Microeconomics
- ECON 2323 Principles of Macroeconomics
- FIN 3310 Business Finance
- MGMT 3305 Management Information Systems
- MGMT 3300 Organizational Behavior and Management
- MKTG 3350 Principles of Marketing
Major in E-Commerce Recommended Sequence

First Semester (13 hours)
- RHET 1311 Composition I
- IFSC 1105 First Year Experience for IFSC/CPSC Majors
- MATH 1302 College Algebra
- ECON 2322 Principles of Microeconomics
- HIST 1311 History of Civilization I

Second Semester (15 hours)
- RHET 1312 Composition II
- CPSC 1370 Computer Literacy
- ECON 2323 Principles of Macroeconomics
- MATH 1342 Business Calculus
- HIST 1312 History of Civilization II

Third Semester (16 hours)
- Philosophy & Methods of Science Requirement I
- Fine Arts Requirement I
- ACCT 2310 Principles of Accounting I
- SPCH 1300 Speech Communications
- Social Science Core Requirement I

Fourth Semester (16 hours)
- Philosophy & Methods of Science Requirement II
- Fine Arts Requirement II
- ACCT 2330 Principles of Accounting II
- Humanities Core Requirement
- Social Science Core Requirement II

Fifth Semester (15 hours)
- MGMT 3300 Organizational Behavior and Management
- FINC 3310 Business Finance
- STAT 2350 Intro to Statistical Methods
- ITEC 3610 Intro to Information Technology & Applications

Sixth Semester (15 hours)
- MKTG 3350 Organizational Behavior and Management
- IFAS 2300 Intro to Information Assurance
- ITEC 3650 Guided Applications in IT & Industry Processes
- ECON 3355 Quantitative Analysis

Seventh Semester (15 hours)
- IFSC 4350 Electronic Commerce
- MGMT 3305 Management of Information Systems
- Humanities Core Requirement
- E-Commerce Specialization Elective I
- E-Commerce Specialization Elective II

Eighth Semester (15 hours)
- ITEC 4610 Project Development and Portfolio Defense
- E-Commerce Specialization Elective III
- E-Commerce Specialization Elective IV
- E-Commerce Specialization Elective V

Minor in Information Technology

Catherine Lowry, Program Coordinator
Thomas Wallace, Instructor and Web Designer

Admission Standards and Procedures

UALR’s information technology (IT) minor is intended for students majoring in the arts, humanities, social sciences, sciences, and other programs that do not have an intensive computing component.

These students do not need to have extensive background in computers or technology, but they should demonstrate:
- Problem-solving skills
- Leadership abilities
- Oral and written communication skills
- Interests in information technology

Visit http://ualr.edu/informationtechnology for a description of the IT minor or to complete an application. Materials may also be obtained at the Information Science office, EIT Building, Room 533, phone (501) 569-8743. To insure consideration of applications, check with the IT minor office for application deadlines.

Admission Requirements

To apply for this program, students must complete or have completed the following:
- Completion of 30 or more semester hours and a GPA of 2.5 or greater.
- Declaration of a major at UALR.

Curriculum

The IT minor consists of three six-hour courses, ITEC 3610, 3650, and 4610. The courses must be taken in sequence. The grading scale for the courses is A, B, I, and NC. An I is given for incomplete work in one or more areas as defined in the Undergraduate Catalog with the exception that a grade of I will convert to a grade of NC instead of F. Any student receiving a grade of NC (No Credit) in an ITEC course will be removed from the program.

Courses in Information Technology (ITEC)

ITEC 3610 Introduction to Information Technology and Applications
Prerequisite: admission to the information technology minor. This course introduces students to the information technology industry and knowledge-based tools. Students demonstrate proficiency in such tools as spreadsheet applications, graphic presentation, Internet uses, and programming. Methods include guest speakers, team activities, interpersonal skills, problem solving skills, time management skills, role playing, and portfolio strategies. Graded A, B, I, or NC. Six credit hours.

ITEC 3650 Guided Applications in Information Technology and Industry Processes
Prerequisite: grade of A, B, or I in ITEC 3610. Project oriented guided applications course. Focus is on broad applications of information technology such as database management, web design, and Internet applications. Students develop web pages to collect data, structure and analyze data using database and spreadsheet software, and present textual and graphical representation of the results. Methods include guest projects with rotating roles, problem conceptualization, time management, and presentation skills. Graded A, B, I, or NC. Six credit hours.

ITEC 4610 Project Development and Portfolio Defense
Prerequisite: grade of A, B, or I in ITEC 3650. The project and portfolio development course allows students, under direction of a mentor, to work on real life issues in an active learning environment. Students will present and defend a professional IT portfolio documenting proficiency in the use of technology to solve problems. Methods include IT internships, special projects, or major field applications. This course is to be completed in two phases. The first phase, “Project Planning and Portfolio Development,” includes problem identification, needs assessment, and system design specifications. The second phase, “Project Completion and Portfolio Defense,” includes design testing, verification, and customer satisfaction. Students should expect that these two phases should take no less than one semester and no more than one academic year. Graded A, B, I, or NC. Six credit hours.
Courses in Information Science

IFSC 1110 Introduction to Ethics
See PHIL 1110. One hour lecture per week. One credit hour.

IFSC 1202 Introduction to Object-oriented Technology
Prerequisite: Familiarity with using a desktop computer. An introduction to application development using Visual Studio with an emphasis on understanding graphical user interface design and object oriented technology. Topics covered include programming fundamentals (sequence, decision, and repetition), working with forms and controls, and manipulating user input and elementary database files. This is a laboratory computer-based course with hands-on exercises. Two hours lab per week per credit hour. Two credit hours.

IFSC 1105 First Year Experience for IFSC/CPSC Majors
A survey of the Computer and Information Science majors with coverage of Interpersonal and Team Communication skills, Time Management & Goal Setting, Techniques for Discovering, Organizing & Presenting Information, Self-Initiated Learning, and Overview of Campus-based resources. Activities include service learning projects, field trips, guest speakers, demonstrations, faculty presentations, and social networks. Two hours lab per week. One credit hour.

IFSC 1310 Internet Technologies
Prerequisite: Familiarity with using a desktop computer. This course is an introduction to Internet client-side technologies and standards-based web development. The course will be divided into sections covering the core components of any web site/page. Core components include Structure, Content, Design (presentation), and Behavior. Three lecture hours per week. Three credit hours.

IFSC 2200 Ethics in the Profession
This course is a survey of ethics and its applications to Engineering, Computing, and Information Technology Professions. It has the twin objectives of (i) Studying professional code of ethics and the responsibilities that they place on technology professionals (ii) Investigating the background and implications of ethical concerns in the real-world professional environment. Two hours lecture per week. Two credit hours.

IFSC 2300 Object-oriented Technology
Prerequisites: IFSC 1202 or equivalent or consent of the instructor. Computer programming in Java. Language used to implement applications that employ objects and demonstrate software development by refinement and inheritance. Topics include data types, control structures, repetitive structures; data structures including arrays, lists, queues, stacks, and trees; recursion and File I/O. Two hours lecture and two hours lab per week. Three credit hours.

IFSC 2305 Computer Systems
Prerequisite: IFSC 1202 or equivalent or consent of the instructor. In-depth introduction to the components of a personal computer; topics include number systems, identification and organization of CPU, memory, and peripherals; cache technology; bus technology; upgrading, troubleshooting, and maintaining a personal computer. Incorporates hands-on laboratory experiences. Three hours lecture per week. Three credit hours.

IFSC 2315 Information Systems Software
Prerequisites: IFSC 2300 and 2305. Computer operating system concepts including processor and memory management, multiprocessing and multiprogramming, inter-process communication, scheduling, virtual memory, device management, input/output, secondary storage and file management, and protection. Three hours lecture per week. Three credit hours.

IFSC 2340 Human Computer Interface
Prerequisites: IFSC 1310 and 2300, or consent of instructor. In-depth study of building user interfaces; user requirements, design, aesthetics, and programming. Three hours lecture per week. Three credit hours.

IFSC 3300 Internet Applications
Prerequisite: IFSC 1310 or equivalent, or consent of Instructor. A hands-on course focusing on the technologies and concepts for creating dynamic and interactive web sites with a special emphasis on client-side technologies. Topics will cover techniques such as how to build efficient and dynamic interactive user interfaces, how to interface with data using standardized, portable formats, how to store/validation data and how to make data more accessible to other applications. Three hours lecture. Three credit hours.

IFSC 3315 Applied Networking
Prerequisite: IFSC 2300 or equivalent or consent of instructor. Networking Concepts with emphasis on the Internet. The OSI and Internet layering conventions are studied to cover the operation of an application system with imbedded network components. End-to-End protocols, Encryption, and Firewalls are considered as components of a complete system with individual contributions to overall system performance. Lab experiments using current generation networking equipment illustrate the networking concepts. Two hours lecture and two hours lab per week. Three credit hours.

IFSC 3320 Database Concepts
Prerequisites: junior standing or consent of the instructor. Offers an introduction to the fundamentals and use of relational databases and focuses on four major topics: ER-diagram, relational algebra, SQL language and Oracle. Three hours lecture. Three credit hours.

IFSC 3330 Current Trends in Database Technology
Prerequisite: IFSC 3320 or equivalent or consent of the instructor. Current trends in database design and management emphasizing typical applications in business, medicine, and science. Survey of modern database technologies including object-related database technology, query processing and optimization, transaction processing concepts, concurrency control techniques, database security and authorization, data mining, data warehousing, and web search engine technology. Discussion of database management and distributed database management issues. Three hours lecture. Three credit hours.

IFSC 3360 System Analysis and Design
Prerequisite: IFSC 2300 or equivalent or consent of the instructor. Fundamental concepts of object-oriented software analysis and design including requirements specification, analysis, and design of software; issues in software reuse, software packaging, and software management. Three hours lecture per week. Three credit hours.

IFSC 3391 Junior Cooperative Education I
Prerequisites: Junior standing in information science or completion of the Information Technology Minor. This course may be substituted for a major elective with the consent of the chairperson. Work experience to complement and extend the classroom experience through the application of a student’s academic experiences in a professional information technology environment. A minimum of 200 hours of work with the participating employer is required. The exact number of hours per week, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements coordinated with the UALR Office of Cooperative Education. Three credit hours.

IFSC 3392 Junior Cooperative Education II
Prerequisites: Junior standing in information science or completion of the Information Technology Minor. This course is designed as a continuing cooperative learning experience beyond IFSC 3391 and may be substituted for a major elective with the consent of the chairperson. Work experience to complement and extend the classroom experience through the application of a student’s academic experiences in a professional information technology environment. A minimum of 200 hours of work with the participating employer is required. The exact number of hours per week, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements coordinated with the UALR Office of Cooperative Education. Three credit hours.
IFSC 4301 Information, Computing, and the Future
Topics on information and computing and their interactions with society. Emphasizes the history and present status of information and computing technologies and their implications for possible future changes in the profession, the field, and society. Includes discussion of change as a factor in personal career preparation, goals, and activities. Topics may vary based on student interest and current events. Three hours lecture. Three credit hours.

IFSC 4325 Data Mining Concepts and Techniques
Prerequisite: IFSC 3320 or equivalent or consent of the instructor. In-depth, practical coverage of essential data mining topics, including OLAP and data warehousing, data pre-processing, concept description, association rules, classification and prediction, and cluster analysis. Advanced topics include mining of weighted graphs, social networks, time-series databases, multimedia databases, spatial databases, object-relational databases, spatial databases, multimedia databases, time-series databases, text databases, the World Wide Web, and applications in several fields. Three hours lecture. Three credit hours.

IFSC 4330 Database Security
Prerequisite: IFSC 3330 or equivalent or consent of the instructor. Focus on security issues in databases systems and introduction of how current and future commercial systems may be designed to ensure secrecy and confidentiality. Topics include security models, basic security mechanisms and software, statistical database security, intrusion detection, security models for next generation databases, tested techniques and proven strategies for securing an Oracle environment — from the operating system to the database to the network, and how to implement security using Oracle’s built-in tools. Three hours lecture. Three credit hours.

IFSC 4333 Network Security
Prerequisite: IFSC 3315 or CPSC 4384 or SYEN 3332 or MGMT 4310, or consent of instructor. This course provides students with a concise and in-depth overview of security issues in current computer networks. It first gives a brief introduction of cryptographic algorithms and protocols underlying network security applications, including encryption, hash function, public key algorithm, digital signatures, and key exchanges. Then, it focuses on the security issues in current computer networks as well as network security tools and applications. The course will cover network intrusion/detection techniques and systems. Three hours lecture. Three credit hours.

IFSC 4345 Information Visualization
Prerequisites: MATH 1451 and IFSC 2300, or consent of the instructor. The design and presentation of information. Use of graphics, animation, sound, visualization software, and hypermedia in helping users understand information. Methods of presenting complex information to enhance comprehension and analysis. Incorporation of visualization techniques into human-computer interfaces. Three hours lecture. Three credit hours.

IFSC 4350 Electronic Commerce
Prerequisite: IFSC 1310 or equivalent and senior standing or consent of instructor. Seminar style course designed for student to be able to describe and apply different electronic commerce business models. Understand technologies in electronic commerce, including the internet and WWW, security systems, electronic payment systems, and intelligent agents. Three hours lecture. Three credit hours.

IFSC 4360 Social Computing
Prerequisite: IFSC 1310 and IFSC 2300, or equivalent, or consent of Instructor. A hands-on course focusing on concepts of the social and information networks, Web as graph, models (such as Power law distribution, scale-free models, preferential attachment models, etc.) that simulate behavioral characteristics of these graphs, basic graph theoretical concepts, characteristics of social media and Web 2.0 or the Social Web (such as blogs, microblogging, social friendship networks, social bookmarking, social news, social media sharing, wikis, etc.), understanding and developing API and mashups, issues and challenges in data crawling and web analytics, network data visualization, exposure to information extraction and retrieval concepts aiming at the highly dynamic and noisy nature of social media, harnessing the collective and web intelligence, and basic concepts of cloud computing. Three lecture hours. Three credit hours.

IFSC 4376 Applied Cryptography
See CPSC 4376 Applied Cryptography Three credit hours.

IFSC 4391 Senior Cooperative Education I
Prerequisites: Senior standing in information science and consent of chairperson if substituted for a major elective. Work experience to complement and extend the classroom experience through the application of a student’s academic experiences in information science in a professional information technology environment. A minimum of 200 hours of work with the participating employer is required. The exact number of hours per week, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements coordinated with the UALR Office of Cooperative Education. Three credit hours.

IFSC 4392 Senior Cooperative Education II
Prerequisites: Senior standing in information science and consent of chairperson if substituted for a major elective. This course is designed as a continuing cooperative learning experience beyond IFSC 4391. Work experience to complement and extend the classroom experience through the application of a student’s academic experiences in information science in a professional information technology environment. A minimum of 200 hours of work with the participating employer is required. The exact number of hours per week, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements coordinated with the UALR Office of Cooperative Education. Three credit hours.

IFSC 4395, 4695 Internship
Prerequisite: junior or senior standing in information science and consent of the chairperson if substituted for a major elective. Professional experience related to the student’s major emphasis under supervision of an advisor. A minimum of four hours work on site per week for each credit hour. Advisor files a grade contract with the chairperson. Three or six credit hours.

IFSC 4396 Capstone Project I
Prerequisite: IFSC 3330 and 3360. Capstone course in which student teams do an analysis of a live information system, document and present their conclusions. Projects are chosen at the end of IFSC 3330. Teams coordinate their efforts on a sponsor’s site and make regular report to the instructor. Classroom meetings are held as necessary to conduct orientations and hear presentations. Three credit hours.

IFSC 4398 Capstone Project II
Prerequisite: IFSC 4396. Continued capstone course in which student teams pursue the design and implementation of system improvements identified in IFSC 4396. Deliverables and schedule are determined by the instructor. Classroom meetings are held as necessary to conduct orientations and hear presentations. Three credit hours.

IFSC 4400, 4200, 4300, 4400, 4500, 4600 Independent Study
Prerequisite: consent of chairperson. Individual research by the student and the instructor. Agreement must be in writing and filed with the chairperson. May be repeated. Maximum of six credit hours per week per credit hour. Advisor files a grade contract with the participating employer is required. The exact number of hours per week, activities, and responsibilities are dependent on the nature of the work experience and must be specified in written agreements coordinated with the UALR Office of Cooperative Education. Three credit hours.

IFSC 4499, 4299, 4399, 4499 Special Topics
Prerequisite: junior standing or consent of instructor. Advanced, specialized topics of current interest in information science. May be repeated up to a maximum of 12 credit hours counting toward the major. One, two, three, or four hours lecture or equivalent per week. Dual-listed in the UALR Graduate Catalog as IFCI 5199, 5299, 5399, 5499. One, two, three, or four credit hours.
Engineering challenges of the 21st century are rarely solved by focusing on only one engineering discipline. Complex engineering “systems” manage the world’s technical and mechanical infrastructure, and the understanding of the interrelationships between the components of those systems is at the heart of UALR’s systems engineering program.

Our forward-looking program equips students to understand the integration of diverse components needed to create complex systems. Graduates develop a strong core understanding of the concepts of systems engineering—including systems design, systems analysis and teamwork—while specializing in one of four specific disciplines: mechanical engineering, electrical engineering, telecommunications engineering or computer engineering.

General Information

Beyond their understanding of integrated systems engineering solutions, graduates of UALR’s program have all the specialized expertise required to succeed and be professionally licensed in their area of specialization.

In the four areas of specialization encompassed in our Systems Engineering program:

1. The mechanical option provides students with skills in design and analysis involving statics and dynamics of mechanical systems, engineering materials, and fluid and thermal systems.

2. The electrical option teaches the design and analysis of various electrical systems including complex networks, digital and analog circuits, and control and power systems.

3. The telecommunications option builds an understanding of cellular and wireless communications, including third-generation wireless technologies and networking protocols, voice over IP, and the emerging mobile multimedia internet.

4. The computer option focuses on the integration of hardware, software, and operating systems with the goal of analyzing and optimizing computer systems, including networked systems, automated robotic systems, and integrated manufacturing systems.

The systems engineering curriculum includes six credit hours of electives to provide flexibility to target a specific career area or acquire broad background in related disciplines. This feature allows a systems engineering graduate tremendous latitude in career choices.

Admission Requirements

Students must be eligible to enroll in MATH 1451 Calculus I and RHET 1312 Composition II to be admitted into the Systems Engineering program. Students who wish to major in Systems Engineering but need to take MATH 1302 College Algebra and/or MATH 1303 Trigonometry may be provisionally admitted into the major once they have enrolled in these courses. However, they may require more time to complete the program.

New freshmen and students who wish to transfer to the Systems Engineering program should consult with the Assistant Dean for Undergraduate Programs. Continuing students will be advised by faculty in the Department of Systems Engineering.

Major in Systems Engineering

The Systems Engineering program is designed to provide a broad-based education in the design and analysis of complex systems, offering four options for specialization: computer, telecommunications, mechanical, and electrical. Students may choose one or more minors, but a minor is not a degree requirement.

![Systems Engineering](https://example.com/systems-engineering-diagram.jpg)
# Bachelor of Science in Systems Engineering (126 credit hours)

## UALR First Year Colloquium Requirement (2 hours)
- SYEN 1210 Introduction to Systems Engineering

(Note: All full-time freshmen entering college for the first time and all transfer students with less than 12 hours of credit must take SYEN 1210.)

## ADHE State Minimum Core General Education Courses (35 hours)
### English/Communication Requirement (6 hours)
- RHET 1311 Composition I
- RHET 2312 Composition II

### Math (3 hours)
- MATH 3322 Introduction to Differential Equations

### Science (8 hours)
- CHEM 1406 General Chemistry for Engineers
- PHYS 2321 Physics for Scientists and Engineers I
- PHYS 2121 Physics for Scientists and Engineers I Lab

### U.S. Government Requirement—choose one (3 hours)
- HIST 2311 U.S. History to 1877
- HIST 2312 U.S. History since 1877
- POLS 1310 American National Government

### Fine Arts/Humanities/Social Science Requirement (11 hours)
- IFSC 2200 Ethics in the Profession
- SYEN 3301 Engineering Economy
- RHET 3326 Technical Writing
- RHET 3316 Writing for the Workplace

Choose one:
- ANTH 2316 Cultural Anthropology
- ARHA 2305 Introduction to Visual Art
- CRJU 2300 Introduction to Criminal Justice
- ECON 2301 Survey of Economics
- ENGL 2337 World Literature
- ENGL 2338 World Literature Themes
- ERSC 2300 Science and Technology in Society
- GEOG 2312 Cultural Geography
- GNST 2300 Introduction to Gender Studies
- HIST 1311 History of Civilization I
- HIST 1312 History of Civilization II
- MCOM 2330 Mass Media and Society
- MUHL 2305 Introduction to Music
- PHIL 2320 Ethics and Society
- POLS 2301 Introduction to Political Science
- PSYC 2300 Psychology and the Human Experience
- RELS 2305 World Religions
- SOCI 2300 Introduction to Sociology
- SPCH 1300 Speech Communication
- THEA 2305 Introduction to Theatre and Dance
- Any CHIN, FREN, GERM, INTR, or SPAN course

### Additional Math and Science—in place of fine arts/humanities/social sciences (4 hours)
- PHYS 2322 Physics for Scientists and Engineers II
- PHYS 2122 Physics for Scientists and Engineers II Lab

### Additional Mathematics Courses for Major (18 credit hours)
- MATH 1451 Calculus I
- MATH 1452 Calculus II
- MATH 2453 Calculus III
- MATH 2350 Introduction to Mathematical Proof
- MATH 3312 Linear Algebra

### Systems Engineering Core Requirements (29 hours)
- SYEN 1302 C/C++ Programming for Engineers and Scientists
- SYEN 2120 Computational Engineering Laboratory
- SYEN 2315/2115 Circuits and Systems /Lab
- SYEN 3312 Optimization Methods in Systems Engineering
- SYEN 3314 Probability Theory and Random Variables
- SYEN 3316 Discrete Event Systems Modeling and Simulation
- SYEN 3318 Decision and Risk Analysis
- SYEN 3320 Systems Engineering Design and Analysis
- SYEN 4385 Systems Engineering Capstone Design I
- SYEN 4386 Systems Engineering Capstone Design II

### Option (Electrical/Mechanical/Telecom/Computers) Requirements (35 hours)—See below

### Management Requirement (3 hours)
- MGMT 3300 Organizational Behavior and Management
- or MGMT 3362 Small Business Management
- or MGMT 4361 Entrepreneurship

### Major Electives (6 hours)
- Student may choose six hours of upper level courses from SYEN, ECET, ETME, CNEG, IFSC, or CPSC with the consent of the advisor.

### Total 126 credit hours

## Option Area Course Requirements

### Electrical Option (35 hours)
- SYEN 1304 Introduction to Electrical Systems
- SYEN 3310 Dynamic Systems Modeling and Simulation
- SYEN 3330/3130 Digital Systems /Lab
- SYEN 3334/3134 Advanced Microprocessor Systems /Lab
- SYEN 3350/3150 Signals and Systems /Lab
- SYEN 3351 Network Analysis
- SYEN 3352/3152 Analog and Digital Electronics /Lab
- SYEN 3356 Electromagnetic Fields and Waves
- SYEN 3358/3158 Fundamentals of Power Systems /Lab
- SYEN 3364 Introduction to Control Systems Engineering

### Mechanical Option (35 hours)
- SYEN 1205 Introduction to Mechanical Systems
- SYEN 2117 Manufacturing Processes Laboratory
- SYEN 2370 Engineering Statics
- SYEN 3371 Engineering Dynamics
- SYEN 3378 Engineering Thermodynamics
- SYEN 3372 Engineering Materials
- SYEN 4374/4174 Fluid Mechanics Course / Lab
- SYEN 4376/4176 Mechanics of Materials Course/Lab
- SYEN 4379 Heat Transfer
- SYEN 4383 Finite Element Analysis
- ETME 2333 Advanced Computer Aided Design
- ETME 4317 Machine Design

### Telecommunication Option (35 hours)
- SYEN 1303 Introduction to Telecommunication Systems
- SYEN 2370 Engineering Statics
- or SYEN 3310 Dynamic Systems Modeling and Simulation
- SYEN 3332 Communication Networks
- SYEN 3350/3150 Signals and Systems /Lab
- SYEN 3354/3154 Digital and Analog Communication Systems / Lab
- SYEN 3356 Electromagnetic Fields and Waves
- SYEN 4358 Cellular and Wireless Communications
- SYEN 4355 Mobile Multimedia Internet
- SYEN 4336 Advances in Communication Networks
- SYEN 4350 Digital Signal Processing
- SYEN 4356 Radio Frequency Techniques and Systems
Computer Option (35 hours)
SYEN 1301 Introduction to Computing Systems
or SYEN 1304 Introduction to Electrical Systems
SYEN 2370 Engineering Statics
or SYEN 3310 Dynamic Systems Modeling and Simulation
SYEN 3330/3130 Digital Systems /Lab
SYEN 3332 Communication Networks
SYEN 3334/3134 Advanced Microprocessor Systems /Lab
SYEN 3336 Computer Architecture
SYEN 3362 Algorithm Design
SYEN 4332 Applied Operating Systems
SYEN 4334 Software System Engineering
SYEN 4331 Advanced Computer Architecture
SYEN 4366 Advanced Digital Systems

Fundamentals of Engineering Examination
The department strongly recommends that students specializing in mechanical and electrical options take the Fundamentals of Engineering Examination in their senior year. The following set of courses represents the recommended set of preparatory courses for the Fundamentals of Engineering Exam:

- MATH 1451 Calculus I
- MATH 1452 Calculus II
- MATH 2453 Calculus III
- MATH 3312 Linear Algebra
- MATH 3322 Introduction to Differential Equations
- CHEM 1402 General Chemistry I
- IFSC 2200 Ethics in the Profession
- SYEN 3301 Engineering Economy
- SYEN 1301 Introduction to Computer Systems
- SYEN 1302 C/C++ Programming for Engineers and Scientists
- SYEN 1207 Introduction to Mechanical Engineering
- SYEN 2315 Circuits and Systems
- and SYEN 2115 Circuits and Systems Laboratory
- SYEN 3301 Engineering Economy
- SYEN 3314 Probability Theory and Random Variables
- SYEN 2370 Engineering Statics ¹
- SYEN 3371 Engineering Dynamics ¹
- SYEN 3372 Engineering Materials ¹
- SYEN 3378 Engineering Thermodynamics ¹
- SYEN 4374 Fluid Mechanics ¹
- SYEN 4376 Mechanics of Materials ¹

Note 1: Required for Mechanical option

Systems Engineering Recommended Four-Year Sequence
First Semester-Fall (16 hours)
SYEN 1210 Introduction to Systems Engineering
CHEM 1406 Engineering Chemistry
or CHEM 1402 General Chemistry I
MATH 1451 Calculus I
RHET 1311 Composition I
HIST 2311 U.S. History to 1877
or HIST 2312 U.S. Hist. Since 1877
or POLS 1310 American National Government

Second Semester (18 hours)
SYEN 1302 C/C++ Programming for Engineers and Scientists
SYEN 2110 Computational Engineering Laboratory
PHYS 2321 Physics for Scientists and Engineers I
PHYS 2121 Physics for Scientists and Engineers I Laboratory
MATH 1452 Calculus II
RHET 2312 Composition II

3 Hour Option Requirement
COMPUTER
SYEN 1301 Introduction to Computing Systems
or SYEN 1304 Introduction to Electrical Engineering

TELECOM
SYEN 1303 Introduction to Telecommunication Systems

ELECTRICAL
SYEN 1301 Introduction to Computing Systems
or SYEN 1304 Introduction to Electrical Engineering

MECHANICAL
SYEN 1207 Introduction to Mechanical Engineering
SYEN 2117 Manufacturing Processes Laboratory

Third Semester (17 hours)
SYEN 2315 Circuits and Systems
SYEN 2115 Circuits and Systems Laboratory
PHYS 2322 Physics for Scientists and Engineers II
PHYS 2122 Physics for Scientists and Engineers II Lab
MATH 3322 Introduction to Differential Equations
MATH 2453 Calculus III
MATH 3312 Linear Algebra

6-7 Hour Option Requirement
COMPUTER
SYEN 2370 Engineering Statics
or SYEN 3310 Dynamic Systems Modeling and Simulation
SYEN 3330 Digital Systems
SYEN 3130 Digital Systems Lab

TELECOM
SYEN 3332 Communication Networks
SYEN 3350 Signals and Systems
SYEN 3150 Signals and Systems Lab

ELECTRICAL
SYEN 3310 Dynamic Systems Modeling and Simulation
SYEN 3300 Digital Systems
SYEN 3130 Digital Systems Lab

MECHANICAL
SYEN 2370 Engineering Statics
ETME 2333 Advanced CAD

Fourth Semester (16-17 hours)
SYEN 3314 Probability Theory and Random Variables
MATH 2453 Calculus III
MATH 3312 Linear Algebra

6-7 Hour Option Requirement
COMPUTER
SYEN 2370 Engineering Statics
or SYEN 3310 Dynamic Systems Modeling and Simulation
SYEN 3330 Digital Systems
SYEN 3130 Digital Systems Lab

TELECOM
SYEN 3332 Communication Networks
SYEN 3350 Signals and Systems
SYEN 3150 Signals and Systems Lab

ELECTRICAL
SYEN 3310 Dynamic Systems Modeling and Simulation
SYEN 3300 Digital Systems
SYEN 3130 Digital Systems Lab

MECHANICAL
SYEN 2370 Engineering Statics
ETME 2333 Advanced CAD

Fifth Semester (15-16 hours)
SYEN 3301 Engineering Economy
SYEN 3312 Optimization Methods in Systems Engineering
9-11 Hour Option Requirement

COMPUTER
- SYEN 3362 Algorithm Design
- SYEN 3336 Computer Architecture
- SYEN 4366 Advanced Digital Systems

TELECOM
- SYEN 3354 Digital and Analog Communication
- SYEN 3154 Digital and Analog Communication Lab
- SYEN 3356 Electromagnetic Fields and Waves
- SYEN 4355 Mobile Multimedia Internet

ELECTRICAL
- SYEN 3351 Network Analysis
- SYEN 3352 Analog and Digital Electronics
- SYEN 3152 Analog and Digital Electronics Lab
- SYEN 3358 Fundamentals of Power Systems
- SYEN 3158 Fundamentals of Power Systems Lab

MECHANICAL
- SYEN 3371 Engineering Dynamics
- SYEN 3372 Engineering Materials
- SYEN 3378 Engineering Thermodynamics

Sixth Semester (15-17 hours)
- SYEN 3316 Discrete Event Systems Modeling and Simulation
- SYEN 3320 Systems Engineering Design and Analysis

9-11 Hour Option Requirement

COMPUTER
- SYEN 3332 Communication Networks
- SYEN 3334 Advanced Microprocessor Systems
- SYEN 3134 Advanced Microprocessor Systems Lab
- SYEN 4334 Software Systems Engineering

TELECOM
- SYEN 2370 Engineering Statics
  or SYEN 3310 Dynamic Systems Modeling and Simulation
- SYEN 4350 Digital Signal Processing
- SYEN 4358 Cellular and Wireless Communication

ELECTRICAL
- SYEN 3334 Advanced Microprocessor Systems
- SYEN 3134 Advanced Microprocessor Systems Lab
- SYEN 3350 Signals and Systems
- SYEN 3150 Signals and Systems Lab
- SYEN 3364 Intro to Control Systems

MECHANICAL
- SYEN 4374 Fluid Mechanics
- SYEN 4174 Fluid Mechanics Lab
- SYEN 4376 Mechanics of Materials
- SYEN 4176 Mechanics of Materials Lab
- SYEN Elective – 3 hour

Seventh Semester (15 hours)
- SYEN 3318 Decision and Risk Analysis
- SYEN 4385 Systems Engineering Capstone Design I
- RHET 3326 Technical Writing
  or RHET 3316 Writing for the Workplace

6 Hour Option Requirement

COMPUTER
- SYEN 4332 Applied Operating Systems
- SYEN Elective – 3 hours

TELECOM
- SYEN 4336 Advances in Communication Networks
- SYEN 4356 Radio Frequency Techniques and Systems

Eighth Semester (11-14 hours)
- SYEN 4386 Systems Engineering Capstone Design II
- IFSC 2200 Ethics in the Profession
- MGMT 3300 Organizational Behavior and Management
  or MGMT 3362 Small Business Management
  or MGMT 4361 New Venture Creation

3-6 Hour Option Requirement

COMPUTER
- SYEN 4331 Advanced Computer Architecture
- SYEN Elective – 3 hours

TELECOM
- SYEN Elective – 3 hours
- SYEN Elective – 3 hours

ELECTRICAL
- SYEN Elective – 3 hours

MECHANICAL
- SYEN 4379 Heat Transfer
- SYEN Elective – 3 hours

3-6 Hour Option Requirement

COMPUTER
- SYEN 4332 Applied Operating Systems
- SYEN Elective – 3 hours

TELECOM
- SYEN Elective – 3 hours
- SYEN Elective – 3 hours

ELECTRICAL
- SYEN Elective – 3 hours

MECHANICAL
- SYEN Elective – 3 hours
- SYEN Elective – 3 hours

3-6 Hour Option Requirement

COMPUTER
- SYEN 4332 Applied Operating Systems
- SYEN Elective – 3 hours

TELECOM
- SYEN Elective – 3 hours
- SYEN Elective – 3 hours

ELECTRICAL
- SYEN Elective – 3 hours

MECHANICAL
- SYEN Elective – 3 hours
- SYEN Elective – 3 hours
Courses in Systems Engineering

SYEN 1205 Introduction to Mechanical Engineering
Prerequisite: none. The mechanical engineering profession; problem solving skills; machine components and tools; forces in structures and fluids, materials and stresses; thermal and energy systems; motion of machinery; mechanical design. Required for SYEN students in the mechanical option, but open to all students on a space available basis. Two hours lecture. Two credit hours.

SYEN 1210 Introduction to Systems Engineering
Prerequisite: MATH 1302 or 1315, or consent of instructor. Introduction to engineering as a profession, engineering problem solving, engineering design process, engineering ethics, engineering communication, history of engineering developments, and case studies involving leading inventions in the engineering field from a variety of disciplines. Students work in teams to build small engineering projects. Course includes industry visits and talks by industry specialists. One hour lecture. Two hours lab. Two credit hours.

SYEN 1301 Introduction to Computer Systems
Prerequisite: consent of instructor. Introduction to the fundamental hardware and software underpinning of computing systems, MOS transistors, logic gates, latches, logic structure, memory, von Neumann model of execution, organization and architecture of a simple computer; machine, assembly, and high-level language programming. Required for systems engineering students in the computer systems option, but open to all students on a space-available basis. Four hours lab. Two hours lecture, two hours lab. Three credit hours.

SYEN 1302 C/C++ Programming for Engineers and Scientists

SYEN 1303 Introduction to Telecommunication Systems
Prerequisite: Math 1303 or equivalent. Source coding, Line Coding, Multiplexing and Multiple Access, Analog and digital modulation, fundamentals of Information theory and coding. Required for systems engineering students in the telecommunication systems option, but open to all students on a space-available basis. Two hours lecture, two hours lab. Three credit hours.

SYEN 1304 Introduction to Electrical Engineering
Prerequisite: consent of instructor. Direct current fundamentals; alternating current and components; electrical and electronic component functions; digital logic devices; computer architecture; computer components; semiconductors; the load line; CMOS logic and memory; other semiconductor devices and circuits; fabrication of ICs and MEMS; power generation, transmission, and distribution; wireless communication systems; digital signal processing; electronics terminology. Required for systems engineering students in the computer systems option, but open to all students on a space-available basis. Two hours lecture. Two hours lab. Three credit hours.

SYEN 1310 Introduction to Systems Engineering
Prerequisite: MATH 1302 or 1315 or consent of instructor. Introduction to engineering as a profession, engineering problem solving, engineering design process, engineering ethics, engineering communication, history of engineering developments, and case studies involving leading inventions in the engineering field from a variety of disciplines. Students work in teams to build small engineering projects. Course includes industry visits and talks by industry specialists. Two hours lecture. Two hours lab. Three credit hours.

SYEN 2110 Computational Engineering Laboratory
Prerequisite concurrent: SYEN 1302 or consent of instructor. Introduction to engineering problem solving using Matlab, vector and matrix operations, data input and output, program flow control, Matlab functions, graphics in 2D and 3D, symbolic mathematics, engineering examples. Three hours lab. One credit hour.

SYEN 2115 Circuits and Systems Laboratory
Prerequisite or corequisite: SYEN 2315. Structured exercises to illustrate class topics. Both SPICE simulation and breadboarding/measurement exercises. Use of spectrum analyzer to determine frequency response and system identification. Two hours lab. One credit hour.

SYEN 2117 Manufacturing Processes Laboratory
Prerequisite or corequisite: ETME 2317 or SYEN 1205. Introduction to machine shop equipment and processes; metal fabricating applications, including metal cutting, such as turning, drilling, milling; welding, and measurement and inspection. Course project and the application of Ethics and safety in design and manufacturing. One three-hour lab, One credit hour.

SYEN 2310 Systems Modeling – Discrete
Prerequisite: MATH 1452. Introduction to dynamic modeling, converting real world problems into mathematical models, discrete dynamical system models with examples from natural sciences, social sciences, and engineering, systems with inputs, probabilistic modeling with discrete systems. Three hours lecture. Three credit hours.

SYEN 2315 Circuits and Systems

SYEN 2370 Engineering Statics
Prerequisite: PHYS 2321 or consent of instructor. Prerequisite concurrent: MATH 2453 or consent of instructor. Static equilibrium of particles, equivalent systems of forces, equilibrium of rigid bodies, centroids and centers of gravity, analysis of structures, dry friction, and moments of inertia. Three hours lecture. Three credit hours.

SYEN 3110 Dynamic Systems Modeling and Simulation Laboratory
Prerequisite or corequisite: SYEN 3310. Modeling and simulation of dynamic systems on personal computers. Introduction to computer modeling. Graphical presentation of results. Two hours lab. One credit hour.

SYEN 3130 Digital Systems Laboratory
Prerequisite or corequisite: SYEN 3330. Weekly laboratory providing practical knowledge in designing, assembling, testing, and simulating combinational and sequential digital circuits. Two hours lab. One credit hour.

SYEN 3134 Advanced Microprocessor Systems Laboratory
Prerequisite or corequisite: SYEN 3334. Laboratory course to accompany SYEN 3334 Advanced Microprocessor Systems. Two hours lab. One credit hour.
SYEN 3150 Signals and Systems Laboratory
Prerequisite or co-requisite: SYEN 3350. Laboratory course to accompany SYEN 3350 Signals and Systems. Two hours lab. One credit hour.

SYEN 3152 Digital and Analog Electronics Laboratory
Prerequisite or corequisite: SYEN 3352. Laboratory course to accompany SYEN 3352 Analog and Digital Electronics. Two hours lab. One credit hour.

SYEN 3154 Digital and Analog Communications Laboratory
Prerequisite or corequisite: SYEN 3354. Weekly laboratory experiments to accompany Communication Systems I. Two hours lab. One credit hour.

SYEN 3301 Engineering Economy
Prerequisite: MATH 1311, 1342 or 1451, or consent of instructor. Introduction to engineering economic decisions for evaluating the worth of products, services, projects and systems; time value of money, economic equivalence concepts, comparison of investment alternatives, evaluating economic life and replacement analysis, inflation, depreciation and impact of taxes on engineering decisions, and economic risk analysis. Three hours lecture. Three credit hours. Cross listed as CNMG 3302.

SYEN 3310 Dynamic Systems Modeling and Simulation
Prerequisites: MATH 3312 and 3322. Introduction to mathematical modeling of dynamic systems, continuous and discrete system models, system response in time and frequency domains, transfer functions, stability characterization, state-space formulation of modeling problems, fitting models to data, examples from sciences and engineering. Three hours lecture. Three credit hours.

SYEN 3312 Optimization Methods in Systems Engineering
Prerequisites: MATH 2453 and 3312. Foundation of linear programming, non-linear programming, integer programming, dynamic programming, discrete time optimal control, continuous time optimal control, and artificial intelligence (AI) techniques for solving optimization problems. Three hours lecture. Three credit hours.

SYEN 3314 Probability Theory and Random Variables
Prerequisite or concurrent: MATH 2453. Sample space and events, axioms of probability, conditional probability, independence, Bayes’ rule, discrete and continuous random variables and probability distributions, joint probability distributions, random sampling, limit theorems, confidence intervals, hypothesis testing, introduction to random processes. Three hours lecture. Three credit hours.

SYEN 3316 Discrete Event Systems Modeling and Simulation
Prerequisites: SYEN 3314. The theory and practice of discrete-event simulation modeling and analysis, discrete-event dynamic systems (DEDS), simulation logic and data structures, random number generation, computational issues, experiment design, output analysis, model verification and validation, and modern simulation languages including animation. Three hours lecture. Three credit hours.

SYEN 3318 Decision and Risk Analysis
Prerequisite: SYEN 3312 and 3314. A study in analytic techniques for rational decision-making. Address uncertainty, conflicting objectives, and risk attitudes. Modeling uncertainty; rational decision-making principles; representing decision problems with value trees, decision trees, and influence diagrams; solving value hierarchies, decision trees and influence diagrams; defining and calculating the value of information; incorporating risk attitudes into the analysis; and conducting sensitivity analyses. Three hours lecture. Three credit hours.

SYEN 3320 Systems Engineering Design and Analysis
Prerequisite: SYEN 3312. An integrated introduction to systems design, analysis, and management. The steps of the systems engineering lifecycle process, including identification of system requirements, system concept, engineering design, system testing and integration, and system operation and support. Presentation of basic systems analysis tools, including decision-making, economic evaluation, modeling and simulation, and statistical process control. Elements of systems engineering program management and evaluation. Three hours lecture. Three credit hours.

SYEN 3330 Digital Systems
Prerequisites: SYEN 1302 and 2315. An introduction to digital system design necessary to do modern digital design. Exposure to a balanced treatment of logic design, digital system design, and computer system design basics. New paradigms that cover classical topics and integrate modern technology into the discussion for a real-world viewpoint of modern computer systems. Three hours lecture. Three credit hours.

SYEN 3332 Communication Networks

SYEN 3334 Advanced Microprocessor Systems
Prerequisite: SYEN 3330. The 80×86 Intel series of microprocessors (from the 8086 to the Pentium members of the series). Principles of microprocessor system design. Architecture of microprocessors, memory interfacing, assembly language programming, I/O programming, I/O peripheral devices, I/O interface design, and data communications. Three hours lecture. Three credit hours.

SYEN 3336 Computer Architecture
Prerequisites: SYEN3330, or consent of the instructor. The evolution of computers, design methodology, processor basics, data path and control design, memory organization, and system organization. Three hours lecture. Three credit hours.

SYEN 3350 Signals and Systems
Prerequisites: MATH 3322 and corequisites MATH 2453. Linear system theory, convolution, sampling theorem, Fourier series representation, Laplace transform, Fourier transform, digital filtering. Three hours lecture. Three credit hours.

SYEN 3351 Network Analysis
Prerequisites: SYEN 2315 and 2115. Basic circuit laws; circuit analysis methods; capacitive and inductive transients and equivalent circuits; initial, final, and first-order circuits; Laplace transforms; circuit analysis with Laplace transforms; transfer functions; sinusoidal steady-state analysis; frequency response analysis and Bode plots; waveform analysis; Fourier analysis. Three hours lecture. Three credit hours.

SYEN 3352 Analog and Digital Electronics
Prerequisites: SYEN 2315 and 2115. Electronic systems; measurement sensors and actuators; amplification; feedback; semiconductors and diodes; field effect transistors; bipolar junction transistors; analog signal processing; digital systems; sequential logic; digital devices; microcomputers; data acquisition and conversion; system design. Three hours lecture. Three credit hours.

SYEN 3354 Digital and Analog Communication
Prerequisites: SYEN 3350, corequisite 3314. Introduction to communication systems, signals and spectra, signal transmission over communication channels, filtering, linear and exponential CW modulation, sampling, pulse modulation, random signals, noise in communication systems. Three hours lecture. Three credit hours.
SYEN 3356 Electromagnetic Fields and Waves
Prerequisites: SYEN 2315 and MATH 2453. Vector algebra and vector calculus; electrostatics, magnetostatics, Maxwell’s equations for time-varying fields, plane- wave propagation; transmission lines; wave reflection and transmission; radiation and antennas. Three hours lecture. Three credit hours.

SYEN 3358 Fundamentals of Power Systems
Prerequisite: SYEN 2315. Electrical machines: generators, motors, and transformers; electrical and electronic drives; motor control and power electronics; electric utility power systems; generation, transmission, distribution, and utilization of electricity. Three hours lecture. Three credit hours.

SYEN 3362 Algorithm Design
Prerequisite: SYEN 1302. Design, analysis, and implementation of algorithms important to computer systems and telecommunication systems; algorithmic design patterns and frameworks; data structures; combinatorial algorithms; graph algorithms; geometric algorithms; numerical algorithms; and internet algorithms, including text processing, cryptography, and network algorithms. Three hours lecture. Three credit hours.

SYEN 3364 Introduction to Control Systems Engineering
Prerequisite: MATH 3322. Introduction to feedback digital control systems, PID control, continuous modeling of physical systems, application of integral transforms to control system design and analysis, transfer functions, block diagrams, control system characteristics, stability analysis, performance criteria, frequency response methods. Three hours lecture. Three credit hour.

SYEN 3370 Statics and Dynamics
Prerequisite: PHYS 2321 or consent of instructor. Prerequisite concurrent: MATH 2453 or consent of instructor. Statics of particles, equivalent systems of forces, equilibrium of rigid bodies, centroids and centers of gravity, analysis of structures, friction, moments of inertia, kinematics and kinetics of particles, introduction to kinematics and kinetics of rigid bodies, forces and accelerations. Three hours lecture. Three credit hours. Cross listed as CNMG 3370.

SYEN 3371 Engineering Dynamics
Prerequisite: SYEN 2370 or consent of instructor. Kinematics and kinetics of particles, systems of particles, and rigid bodies; energy and momentum methods; mechanical vibrations and resonance; introduction to structural dynamics due to time-varying loads, such as wind and seismic loading. Three hours lecture. Three credit hours.

SYEN 3372 Engineering Materials
Prerequisites: CHEM 1402 and MATH 1451. Atomic structure and bonding, crystal structures, crystal geometry, solidification, crystalline imperfections, and diffusion in solids, mechanical properties of metals, polymeric materials, phase diagrams, engineering alloys, ceramics, composite materials, corrosion, electrical properties of materials, optical properties and superconductive materials, magnetic materials. Cross-listed with CNMG 3372. Three hours lecture. Three credit hours.

SYEN 3378 Engineering Thermodynamics
Prerequisites: CHEM 1402, PHYS 2321, and MATH 1452, or consent of instructor. Properties of pure substances, thermodynamic processes, heat and work, the first law of thermodynamics, closed systems, enthalpy, open systems, the second law of thermodynamics, entropy, exergy, and an introduction to power and refrigeration cycles. Three hours lecture. Three credit hours. Cross listed as CNMG 3378.

SYEN 3391 Cooperative Education in Systems Engineering I
Prerequisites: declaration of systems engineering major, completion of at least 60 hours total credit hours with an overall GPA of 2.5 or higher, completion of 20 or more credit hours of systems engineering courses with a GPA of 2.5 or higher, and permission of the systems engineering cooperative education faculty coordinator. This course is for qualified students who would like to combine classroom study with at least 200 hours of engineering-related paid employment. The course is a partnership between the student, the employer, the systems engineering faculty, and the UALR Office of Cooperative Education. An individualized Cooperative Education Learning Agreement will specify the detailed work assignment, including employer, supervisor, job title, work schedule, and rate of pay, as well as the academic requirements, including learning objectives, learning activities, documentation of learning, learning assessments, and grading policy. This course will be allowed to satisfy up to six hours of program electives. Three credit hours.

SYEN 4100, 4200, 4300, 4400, 4500 Independent Study
Prerequisite: Senior standing. Individual investigation by an upper level student. Topics determined in consultation with supervising faculty. For each credit hour, the student is expected to work two to four hours per week as determined by the instructor. Agreement must be in writing and filed with the department chairperson. A maximum of six credit hours can be applied toward the SYEN major requirement. One to five credit hours.

SYEN 4174 Fluid Mechanics Laboratory
Prerequisite or corequisite: SYEN 4374. Analysis of experimental data, basic electrical measurements and sensing devices, pressure measurement, flow measurement, temperature measurement, data acquisition and processing, report writing and presentation, design of experiments. Cross-listed with CNMG 4174. Two hours lab. One credit hour.

SYEN 4176 Mechanics of Materials Laboratory
Prerequisite or corequisite: SYEN 4376. Analysis of experimental data, basic electrical measurements and sensing devices, force measurement, torque measurement, strain measurement, motion measurement, vibration measurement, data acquisition and processing, report writing and presentation, design of experiments. Two hours lab. One credit hour. Cross listed as CNMG 4176.

SYEN 4182 MEMS and Microsystems Laboratory
Prerequisites: SYEN 4376 and 4176 or consent of instructor. Principles of microfabrication for microelectronic devices, sensors, and micromechanical structures, MEMS, and microsystems with applications in engineering. Course comprised of laboratory work and accompanying lectures that cover silicon oxidation, photolithography, thin film deposition, etching, electrochemical deposition (plating) and packaging. Some selected topics in yield and reliability, as well as process simulation may be covered. Dual-listed in the UALR Graduate Catalog as SYEN 5182. Two hours lab. One credit hour.

SYEN 4314 Queuing Theory and Systems
Prerequisite: SYEN 3314 or equivalent. Theoretical foundations, models and techniques or queuing theory. Topics include classic models of queues including simple and advanced Markovian queuing models, and models with general arrival and service patterns. Applications of queuing theory and queuing systems design considerations. Dual-listed in the UALR Graduate Catalog as SYEN 5314. Three hours lecture. Three credit hours.
SYEN 4320 Linear State-Space Control Systems
Prerequisites: SYEN 3364 or consent of instructor. Introduction to modern control systems, state-space models of linear time-invariant systems, solution to state equations, linear transformations and canonical forms, stability analysis, controller synthesis via state feedback, tracking system design, observer-based compensator design, optimal control problems. Dual-listed in the UALR Graduate Catalog as SYEN 5320. Three hours lecture. Three credit hours.

SYEN 4322 Modeling Transportation Systems
Prerequisites: SYEN 3312 or equivalent, SYEN 3314 or equivalent, or Consent of Instructor. The objectives of transportation analysis are defined to include mobility provision, consequence identification and selection of courses of action. A set of methodologies has evolved to exclusively address transport modeling, including demand forecasting, technology representation, network-flow, and multi-attribute assessment of performance. This course reviews very powerful tools to analyze such a class of technological and socioeconomic problems, characterized by the explicit recognition of a spatial dimension. Dual-listed in the UALR Graduate Catalog as SYEN 5322. Three lecture hours. Three credit hours.

SYEN 4325 Fuzzy Logic in Control and Systems Engineering
Prerequisite: SYEN 3364. Introduction, basic concepts of fuzzy logic, fuzzy sets, fuzzy relations, fuzzy If/Then rules, fuzzy implications and approximate reasoning, fuzzy logic in control theory, hierarchical intelligent control, fuzzy logic applications in information systems, fuzzy model identification, neuro-fuzzy systems and genetic algorithms. Dual-listed in the UALR Graduate Catalog as SYEN 5325. Three hours lecture. Three credit hours.

SYEN 4329 Robust and Optimal Control
Prerequisite: SYEN 4320. Fundamentals of linear systems, signal and system spaces, power and spectral norms, feedback structure, internal stability, coprime factorization, Bode’s gain and phase relations, observability, controllability, balanced realizations, model reduction, model uncertainty, small gain theorem, controller parameterization, existence of stabilizing controllers, H2 optimal control, synthesis of state feedback via LMIs, and H∞ control, and uncertain systems. Dual-listed in the UALR Graduate Catalog as SYEN 5329. Three hours lecture. Three credit hours.

SYEN 4331 Advanced Computer Architecture
Prerequisites: SYEN 3336, or consent of the instructor. Introduction to Computer Systems, Instruction-Set architecture, Arithmetic/Logic Unit, Data Path and Control, Memory System Design, I/O Interface, and Advanced Architectures. Dual-listed in the UALR Graduate Catalog as SYEN 5331. Three hours lecture. Three credit hours.

SYEN 4332 Applied Operating Systems

SYEN 4334 Software System Engineering
Prerequisite: SYEN 3362. Engineering approach to the development of software systems, including the life cycle steps of project planning, requirements analysis and specification, design, production, testing, and maintenance of software systems. Three hours lecture. Three credit hours.

SYEN 4336 Advances in Communication Networks

SYEN 4340 Applied Numerical Methods
Prerequisite: MATH 3312 and 3322. MATLAB fundamentals and programming, roundoff and truncation errors, roots of equations, systems of linear algebraic equations, curve fitting, polynomial interpolation, numerical integration, ordinary differential equations, and eigenvalues. Three hours lecture. Three credit hours. Dual-listed in the UALR Graduate Catalog as SYEN 5340.

SYEN 4342 Linear Program and Network Flows
Prerequisite: SYEN 3312 or equivalent, or Consent of Instructor. This course covers salient linear optimization topics, including computational issues such as decomposition, LU factorization, and network flow. Of equal interest is the equivalence between the network flow paradigm and discrete optimization of a model and its solution algorithms. The relationship between the network flow paradigm and discrete optimization is also emphasized. Software libraries are available to solve linear optimization models. Dual-listed in the UALR Graduate Catalog as SYEN 5342. Three hours lecture. Three credit hours.

SYEN 4350 Digital Signal Processing
Prerequisites: SYEN 3350. Signals and signal processing; discrete-time signals and systems in the time and frequency domains; digital processing of continuous-time signals; finite-length discrete transforms; discrete-time signals and systems in the z-domain; LTI discrete-time systems in the transform domain; digital filter structures; IIR digital filter design; FIR digital filter design; DSP algorithm implementation; analysis of finite word-length effects; multi-rate DSP fundamentals; multi-rate filter banks and wavelets; applications of DSP. Three hours lecture. Three credit hours.

SYEN 4352 Spatial Time Series
Prerequisites: SYEN 3312, SYEN 3314 or STAT 3353, and consent of instructor. Instead of a single stream of data, multiple streams are gathered over the target can provide better information. Because of the inherent spatial correlation among these data streams, spatial time-series can play an important role in multiple-sensor and other data-intensive applications. Image-processing applications include image rectification and restoration, image enhancement, image classification, and data merging. Signal processing applications include Spatial-temporal Autoregressive Moving-Average model and Intervention Analysis. Unifying these diverse analyses and applications is Markov Random Field Theory. Dual-listed in the UALR Graduate Catalog as SYEN 5352. Three hours lecture. Three credit hours.

SYEN 4353 Advanced Digital Communications
Prerequisites: SYEN 3154 and 3354. In-depth examination of wireless digital communication design strategies. Topics covered include digital modulation, radiowave propagation characteristics. Signal detection methods, BER performance improvement and simulation techniques RF/hardware architectures, migration path for modulation and demodulation techniques, signal processing building blocks for wireless systems, method for mitigating wireless channel impairments, perform system simulations, BER and channel models, predict system performance and evaluate trade-offs, list TDMA and CDMA techniques, and 3G evolution, describe design issues for wireless systems, particularly those issue in which transmit and receive implementation affect system performance. Dual-listed in the UALR Graduate Catalog as SYEN 5353. Three hours lecture. Three credit hours.
SYEN 4354 Power Systems Analysis
Prerequisites: SYEN 3358, or consent of the instructor. Fundamental concepts of power system analysis, transmission line parameters, system models, steady-state performance, network calculations, power flow solutions, fault studies, symmetrical components, operation, and control. Dual-listed in the UALR Graduate Catalog as SYEN 5354. Three hours lecture. Three credit hours.

SYEN 4355 Mobile Multimedia Internet
Prerequisites: SYEN 3314. The course will provide state-of-the-art perspective of the emerging landscape of Mobile Multimedia Internet. Key subject areas covered in advanced mobile internet technologies include WLAN, GPRS, 3G UMTS, and VoIP. Topics covered will involve architecture of the systems, protocol issues, the design and analysis of solutions for mobility, quality of service, mobile IP, and standardization efforts. Three hours lecture. Three credit hours.

SYEN 4356 Radio Frequency Techniques and Systems

SYEN 4358 Cellular and Wireless Communications
Prerequisites: SYEN 3354 and SYEN 3314. Characteristics of mobile radio environment, multi-path and fading, cellular communication concepts, channel allocation and reuse, access and scheduling techniques, system capacity, power control, diversity, coding, modulation in cellular systems, examples of digital wireless systems, wireless local area networks. Three hours lecture. Three credit hours.

SYEN 4359 Optical Networking
Prerequisite: SYEN 4355 or consent of instructor. Fundamental concepts of networking, optical networks elements and devices, SONET, WDM, DWDM, optical control plane, MPLS and GMPLS. Free Space Optical Mesh Networks. Three credit hours.

SYEN 4362 Neural Networks & Adaptive Systems
Prerequisites: SYEN 3312 or consent of the instructor. Introduction to neural networks, neuron models and learning strategies, pattern recognition, multi-layer perception, back propagation, principle component analysis, self-organizing feature maps, neural networks for time series-forecasting. Dual-listed in UALR Undergraduate Catalog as SYEN 5362. Three hours lecture. Three credit hours.

SYEN 4366 Advanced Digital Systems
Prerequisites: SYEN 3330 and 3130. Advanced design principles for digital systems. Hardware modeling in the hardware description language VHDL (Verilog Hardware Description Language), compilation techniques for hardware models, and logic-level synthesis and optimization techniques for combinational and sequential circuits. Dual-listed in the UALR Graduate Catalog as SYEN 5366. Three hours lecture. Three credit hours.

SYEN 4374 Fluid Mechanics
Prerequisites: PHYS 2321, MATH 3322, Corequisite: SYEN 3378. Properties of fluids, pressure and fluid statics, fluid kinematics, Bernoulli and energy equations, momentum, dimensional analysis, flow in pipes, differential analysis, approximations of the Navier-Stokes equation, drag and lift, compressible flow, open-channel flow, turbomachinery, computational fluid dynamics (CFD). Three hours lecture. Three credit hours. Cross listed as CNMG 4374.

SYEN 4375 Mechanical Vibration
Prerequisite: SYEN 3370 or consent of instructor. Analysis of linear multi-degree of freedom systems. Lagrangian formulation, model analysis, lumped parameter analysis of discrete systems, and continuous system vibrations. Introduction to non-linear systems. Three hours lecture. Three credit hours.

SYEN 4376 Mechanics of Materials
Prerequisites: SYEN 3370 and 3372. Stress, strain, axial loading, torsion, pure bending, analysis and design of beams, shearing stresses in beams and thin-walled members, transformation of stress and strain, principal stresses, deflection of beams, columns, energy methods. Three hours lecture. Three credit hours. Cross listed as CNMG 4376.

SYEN 4379 Heat Transfer
Prerequisite: SYEN 4374 or consent of instructor. Steady and transient heat conduction; forced, natural, and multi-phase convection; heat exchanger design and analysis; radiation heat transfer; mass transfer. Three hours lecture. Three credit hours. Cross listed as CNMG 4379.

SYEN 4380 HVACR Engineering Fundamentals
Prerequisite: CNMG 2274 or SYEN/CNMG 3378, or consent of instructor. Fundamentals of heating, ventilating, air-conditioning, and refrigeration (HVACR) engineering; refrigeration cycles; psychrometrics; indoor air quality and ventilation; heating and cooling loads. Two hours lecture. Two hours lab. Three credit hours. Cross listed as CNMG 4380.

SYEN 4381 Thermal Powerplant Engineering
Prerequisite: CNMG 2274 or SYEN/CNMG 3378, or consent of instructor. Thermodynamics of combustion and power cycles; internal combustion engines; steam turbine powerplants; gas turbine powerplants; combined cycle powerplants; introduction to alternative energy systems. Two hours lecture. Two hours lab. Three credit hours. Dual-listed in UALR Graduate Catalog as SYEN 5381.

SYEN 4382 MEMS and Microsystems
Prerequisites: SYEN 2315, 3372, and 3378. Overview of MEMS and Microsystems, applications, working principles of Microsystems, engineering science for Microsystem design and fabrication, engineering mechanics for Microsystem design, thermofluid engineering and Microsystem design, scaling laws in miniaturization, materials for MEMS and Microsystems, microsystem fabrication processes, overview of microfabrication, Microsystems design, Microsystems modeling and simulation, microsystem packaging, overview of nanoscience and nanotechnology. Three hours lecture. Three credit hours

SYEN 4383 Finite Element Analysis
Prerequisite: SYEN 3378 and 4376. Basic concepts of the finite element method (FEM); stiffness matrices, spring and bar elements; truss structures, the direct stiffness method; flexure elements; method of weighted residuals; interpolation functions for general element formulation; applications in heat transfer, fluid mechanics, and solid mechanics; structural dynamics. Dual-listed in UALR Graduate Catalog as SYEN 5383. Three hours lecture. Three credit hours.

SYEN 4384 Computer Methods in Fluids and Heat Transfer
Prerequisite: SYEN 4374, or with instructor’s consent. Modeling and simulation of thermal-fluid problems using commercial software, finite volume method, solution algorithms for pressure-velocity coupling, solution of discretized equations, unsteady flows, uncertainty in CFD modeling, methods for dealing with complex geometries, modeling of combustion, heat transfer, and unsteady flows. Three hours lecture. Three credit hours.
SYEN 4385 Systems Engineering Capstone Design I  
Prerequisite: completion of at least 40 credit hours of SYEN courses.  
First semester of systems engineering capstone design sequence.  
Focuses on the requirements definition process and involves designing 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, using appropriate engineering standards. Students work in multidisciplinary teams on system engineering design projects and make formal written and oral presentations of their preliminary work. Three hours lecture. Three credit hours.

SYEN 4386 Systems Engineering Capstone Design II  
Prerequisite: SYEN 4385. Second semester of systems engineering capstone design sequence. Focuses on the solution definition process and involves designing 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, using appropriate engineering standards. Students work in multidisciplinary teams on system engineering design projects and make formal written and oral presentations of their preliminary work. Two hours lecture, two hours lab. Three credit hours.

SYEN 4389 Professional Engineering Licensure  
Prerequisite concurrent: Senior standing and registration for the Fundamentals of Engineering exam, or consent of instructor. Legal, regulatory, and ethical issues related to the practice of engineering; preparation for engineering licensure examinations. Three hours lecture. Three credit hours. Cross listed as CNMG 4389.

SYEN 4391 Cooperative Education in Systems Engineering II  
Prerequisites: SYEN 3391, an overall GPA of 2.5 or higher, completion of 40 or more credit hours of systems engineering courses with a GPA of 2.5 or higher, and permission of the systems engineering cooperative education faculty coordinator. This course is for qualified students who would like to combine classroom study with at least 200 hours of engineering-related paid employment. The course is a partnership between the student, the employer, the systems engineering faculty, and the UALR Office of Cooperative Education. An individualized Cooperative Education Learning Agreement will specify the detailed work assignment, including employer, supervisor, job title, work schedule, and rate of pay, as well as the academic requirements, including learning objectives, learning activities, documentation of learning, learning assessments, and grading policy. This course will be allowed to satisfy up to six hours of program electives. Three credit hours.

SYEN 4199, 4299, 4399, 4499 Special Topics  
Prerequisite: consent of instructor. Advanced specialized topics of current interest in systems engineering. Topics vary with faculty interest and availability. Dual- listed in the UALR Graduate Catalog as SYEN 5199, 5299, 5399, 5499. One, two, three, or four hours lecture. One, two, three, or four credit hours.
The College of Professional Studies offers programs in the areas of communication, human services, and public affairs. At the undergraduate level the college offers degree programs in audiology and speech pathology, criminal justice, mass communication, social work, and speech communication. The mass communication program also offers a program in professional and technical writing jointly with the Department of Rhetoric and Writing in the College of Arts, Humanities, and Social Sciences. In addition to the baccalaureate programs, the college offers a two-year associate degree in law enforcement and a Reserve Officers Training Program in military science.

At the graduate level there are degree programs in audiology and speech pathology, criminal justice, applied communication, journalism, public administration, social work, and gerontology. Ph.D. programs are available in communication sciences and disorders, and criminal justice. The college also offers graduate certificate programs in gerontology, marriage and family therapy, nonprofit management, and conflict mediation. These programs are described in the UALR Graduate Catalog.

General Information
Each program in the college takes an applied approach to professional training of students and balances the curriculum between the academic and the professional. The college places scholarship into context by making its programs highly practical and relevant to the job market.

The college has a strong commitment of outreach to the community. As a professional college, it has opportunities to contribute skills and expertise to serve the economic and community development needs in Arkansas and across the nation. The Institute of Government and MidSOUTH Center provide opportunities for public service, as do five centers within the College (Center for Stuttering Research and Treatment, Center for Senior Justice, Center for Juvenile Justice, Center for Environmental Criminology, Center for Nonprofit Organizations and Center for Public Collaboration. The outreach units provide not only extensive faculty involvement but also opportunities for student involvement. All college programs make extensive use of student internships, residencies, and mentorships to help students gain practical experience while in school.

Most departments in the college offer minors for students who major in another field. Descriptions of minors appear in the descriptions of individual departments.

Minor in Human Services
The interdisciplinary human services minor provides an opportunity to sample course work in several professional areas in human services. This minor is an excellent option for students whose career path may bring them into contact with various social services, law enforcement or public administration.

The minor in human services requires 18 hours of course work, including GERO 2300, PADM 3331, SOWK 1301, SPCH 2310 and six hours to be chosen from a list of approved electives with advisement from the dean’s office. A copy of the list of approved electives may be obtained from the dean’s office, which administers the minor or on the College of Professional Studies web page.

Departments

<table>
<thead>
<tr>
<th>Department of Audiology &amp; Speech Pathology</th>
<th>Department of Public Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bachelor of Science in Speech Pathology, with UAMS</td>
<td>• Upper-level courses offered, no undergraduate degree program. Some courses are offered.</td>
</tr>
<tr>
<td>Department of Criminal Justice</td>
<td>School of Social Work</td>
</tr>
<tr>
<td>• Associate of Science in Law Enforcement</td>
<td>• Bachelor of Social Work</td>
</tr>
<tr>
<td>• Bachelor of Arts in Criminal Justice</td>
<td>Department of Speech Communication</td>
</tr>
<tr>
<td>School of Mass Communication</td>
<td>• Bachelor of Arts in Speech Communication</td>
</tr>
<tr>
<td>• Bachelor of Arts in Mass Communication</td>
<td></td>
</tr>
<tr>
<td>Department of Military Science</td>
<td></td>
</tr>
<tr>
<td>• Minor in Military Science – Reserve Officer Training Corps (ROTC)</td>
<td></td>
</tr>
</tbody>
</table>
The undergraduate program in audiology and speech pathology is a pre-professional program following the guidelines of the American Speech-Language-Hearing Association (ASHA). The undergraduate curriculum by itself does not certify the student to work as a professional. The program offers the degree of bachelor of science in speech pathology, providing the pre-professional background needed to pursue graduate training, Arkansas Board of Examiner licensing, ASHA certification in speech-language pathology or audiology, and American Board of Audiology certification in audiology.

The department offers two clinical graduate degrees: a master of science degree in communication disorders and a doctor of audiology degree. Both clinical degrees are offered as part of a consortium with the College of Health Related Professions of the University of Arkansas for Medical Sciences. These clinical graduate programs are accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of ASHA.

General Information

Students considering careers in audiology and/or speech-language pathology should consult the Undergraduate Coordinator, Dr. Laura Smith-Olinde, for advisement early in their college career. Students enrolling in this major are encouraged to complete a graduate program in audiology and/or speech-language pathology. Students may, however, complete the pre-professional B.S. degree and choose to work or pursue advanced training in other professional fields of employment, including Special Education, Social Work or several others. Students with baccalaureate degrees in other areas who are interested in pursuing speech pathology or audiology as a career should see Dr. Betholyn Gentry. These post baccalaureate students will be required to take 30 hours of undergraduate courses before application to the graduate program is allowed.

Students are required to achieve a minimum grade point average of 3.0 and have earned 50 semester hours of course work in order to be fully admitted as a major in speech pathology. Students with fewer than 50 semester hours and/or with a cumulative grade point average below 3.0 may be pre-admitted to the major; these decisions are made on a case-by-case basis. Students must achieve and maintain a minimum grade point average of 3.0 in the major and overall in order to enroll in practicum. Only grades of C or greater are accepted in AUSP courses to fulfill requirements for the major. Students will be allowed only two attempts to earn a grade of C or greater in the following courses:

- AUSP 3350 Phonetics
- AUSP 3360 Language and Speech Acquisition
- AUSP 3361 Speech Anatomy and Physiology
- AUSP 3364 Speech Science

or the department will drop them from the major. Undergraduate students transferring from another college or university into the department must meet department admission requirements. Degree-seeking transfer students must take at least 15 hours in the department.

Suggested minors include gerontology, human services, psychology, any of the sciences, sociology, speech communication, and sign language studies.
Degree Requirement

Minor in Speech Pathology

A minor in speech pathology requires 18 hours of course work, including AUSP 2360 and 3360, and 12 hours from AUSP 3350, 3361, 3362, 3461, 4368, or with the instructor’s permission from AUSP 3363, 4363, 4364, and 4366. Students who minor in speech pathology must meet with Dr. Bethlyn Gentry, the department’s undergraduate advisor for minors, each semester before registering.

Bachelor of Science in Speech Pathology

Core Requirements (44 hours)

Speech Pathology (41 hours)

Junior Year-Fall (12 hours)
- AUSP 2360 Introduction to Speech and Hearing Disorders
- AUSP 3350 Phonetics
- AUSP 3360 Language and Speech Acquisition
- AUSP 3361 Speech Anatomy and Physiology

Junior Year-Spring (12 hours)
- AUSP 3362 Hearing Science
- AUSP 3363 Disorders in Articulation
- AUSP 3365 Clinical Management
- AUSP 4366 Language Disorders

Senior Year-Fall (7 hours)
- AUSP 3364 Speech Science
- AUSP 4162 Practicum I
- AUSP 4368 Audiology

Senior Year-Spring (10 hours)
- AUSP 4163 Practicum II
- AUSP 4363 Voice and Stuttering Disorders
- AUSP 4364 Differential Diagnosis of Speech and Language Disorders
- AUSP 4369 Audiologic Rehabilitation

Minor (18 hours)

Courses in Audiology and Speech Pathology (AUSP)

AUSP 2360 Introduction to Speech and Hearing Disorders
A description and discussion of speech, language, and hearing disorders; therapy surveys and assessment techniques. Three credit hours.

AUSP 3350 Phonetics
In-depth study of principles of phonetics and their application to speech. Three credit hours.

AUSP 3360 Language and Speech Acquisition
Prerequisite: consent of instructor. The study of normal verbal speech and language acquisition. Three credit hours.

AUSP 3361 Speech Anatomy and Physiology
Anatomy and physiology of the speech and hearing mechanism and associated structures. Three credit hours.

AUSP 3362 Hearing Science
Prerequisite: AUSP 2360 or consent of instructor. An introduction to the study of hearing. Emphasis will be given to the elements of sound, auditory physiology, psychoacoustical methods, and theories of hearing. Three credit hours.

AUSP 3363 Disorders in Articulation
Prerequisites: AUSP 2360 and 3350 or consent of instructor. Theory, evaluation, and therapeutic procedures with functional and organic articulatory and phonological disorders. Three credit hours.

AUSP 3364 Speech Science
Prerequisite: AUSP 3350. Speech as an acoustic phenomenon; special reference to voice, rate, articulation; survey of experimental literature; theoretical, practical consideration of mechanical, electrical instruments used in diagnostic, therapeutic, experimental aspects of speech pathology, audiology. Three credit hours.

AUSP 3365 Clinical Management
Prerequisite: AUSP 2360. For majors only. Clinical procedures for working in various practicum settings, using diagnostic and therapeutic techniques, writing behavioral objectives, procedures for report writing, and practical experience with clinician-made and commercial materials. First in the series of practicum courses. Three credit hours.

AUSP 4162 Practicum I
Supervised clinical practice in the areas of speech and/or language disorders. For majors only. Requires at least 15 client clock hours. Must be taken first in clinical practicum series. Prerequisites: Consent of instructor, AUSP 3360, 3365, 3366, and/or 4366. Minimum grade point requirement: 3.0 in major and overall (all college coursework considered in overall calculation). One credit hour.

AUSP 4163 Practicum II
Supervised clinical practice in the areas of speech and/or language disorders. For majors only. Requires at least 15 client clock hours. Second course in clinical practicum series. Prerequisites: Consent of instructor, AUSP 3365 and 4162. Minimum grade point requirement: 3.0 in major and overall (all college coursework considered in overall calculation). One credit hour.

AUSP 4164 Practicum III
Prerequisites: AUSP 3365, consent of instructor. For majors only. Supervised clinical activity in specialized areas. Requires 60 client clock hours. Only two practicums may be taken on the undergraduate level. One credit hour.

AUSP 4363 Voice and Stuttering Disorders
Prerequisites: AUSP 2360, 3361, 3350, or consent of instructor. Etiology, evaluative, and therapeutic procedures for persons with voice disorders and with various types of verbal disfluency behaviors. Three credit hours.

AUSP 4364 Differential Diagnosis of Speech and Language Disorders
Prerequisites: AUSP 2360, 3360, 3365, or consent of instructor. Interview and test procedures used in evaluating speech and language disorders. Emphasis on use and interpretation of standardized test measures. Three credit hours.

AUSP 4366 Language Disorders
Prerequisite: AUSP 3360 or consent of instructor. Language disorders in adults and children including types of language disorders, etiology, neurological and theoretical correlates, diagnostic procedures and test interpretation, and treatment protocols. Dual-listed in the UALR Graduate Catalog as AUSP 5366. Three credit hours.

AUSP 4368 Audiology
Prerequisite: AUSP 3362. Principles of auditory reception; the hearing mechanism; problems involved in measuring, evaluating, and conserving hearing. Clinical observation. Dual-listed in the UALR Graduate Catalog as AUSP 5368. Three credit hours.

AUSP 4369 Audiologic Rehabilitation
Prerequisite: AUSP 2360, 4368, or consent of instructor. Principles of audiologic habilitation/rehabilitation with infants, children, and adults with hearing loss. Discussion of communication and education options for children with hearing loss, counseling techniques, communication strategies, and the use of amplification and other assistive technologies. Three credit hours.

AUSP 4101, 4201, 4301 Independent Study
Students will read and research in a selected area of communicative disorders. Projects and papers must be approved by the instructor before registration. One, two, or three credit hours.
The department provides courses for students pursuing careers in law enforcement, corrections, and juvenile and adult courts. A bachelor of arts in criminal justice, an associate of science in law enforcement, and a minor in criminal justice are available through the department.

General Information
Major in Criminal Justice
A major in criminal justice requires 30 credit hours, including CRJU 2300, 3303, 3304, 4300, and 4304. While the department will consider similar courses from other schools as substitutes for the CRJU core courses, the acceptance of those courses is solely at the department’s discretion. Students majoring in criminal justice must complete at least 15 hours within the Department of Criminal Justice at UALR. Admission to the major requires completion of RHET 1311, RHET 1312 and GPA of 2.25 or better; transfer students must have at least 12 hours at UALR; however, students may be provisionally admitted to the major and advised within the department before meeting full requirements for admission to the major. For information regarding graduate study in criminal justice, see the UALR Graduate Catalog.

Minor in Criminal Justice
A minor in criminal justice requires 18 credit hours, which must include CRJU 2300.

Associate of Science Degree in Law Enforcement
This two-year associate degree program in law enforcement requires 62 hours, including CRJU 2300 and 3304. Students pursuing the AS in law enforcement must take at least nine of the required criminal justice hours within the Department of Criminal Justice at UALR. Twenty of the 62 hours must be at the 2000-level or higher. Credits earned for the associate degree may be applied to the bachelor of arts in criminal justice.

ASSOCIATE OF SCIENCE IN LAW ENFORCEMENT DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>Core Curriculum (15 hours)</th>
<th>Pattern Requirements (23 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1302 College Algebra or MATH 1321 Quantitative and Mathematical Reasoning</td>
<td>One of the following courses</td>
</tr>
<tr>
<td>RHET 1311 Composition I</td>
<td>ARHA 2305 Introduction to Visual Art</td>
</tr>
<tr>
<td>RHET 1312 Composition II</td>
<td>MUHL 2305 Introduction to Art</td>
</tr>
<tr>
<td>SPCH 1300 Speech Communication</td>
<td>DRTH 2305 Introduction to Theatre and Dance</td>
</tr>
<tr>
<td>One of the following courses</td>
<td>Required Courses for Major (15 hours)</td>
</tr>
<tr>
<td>HIST 2311 US History to 1877</td>
<td>CRJU 2300 Introduction to Criminal Justice</td>
</tr>
<tr>
<td>HIST 2312 US History since 1877</td>
<td>CRJU 3304 Police and Society</td>
</tr>
<tr>
<td>POLS 1310 American National Government</td>
<td>Three upper-level CRJU courses (9 hours)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>One of the following courses</th>
<th>Undesignated Electives (9 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCOM 2330 Mass Media and Society</td>
<td>Selected in consultation with the academic advisor</td>
</tr>
<tr>
<td>SOCI 2300 Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>PSYC 2300 Psychology and the Human Experience</td>
<td></td>
</tr>
<tr>
<td>One of the following courses</td>
<td>Proficiency in a second language or a 2000 level course</td>
</tr>
<tr>
<td>ANTH 1415 Physical Anthropology</td>
<td>SPAN 1311, 1312 and 2311 OR</td>
</tr>
<tr>
<td>ASTR 1301 and 1101 Introduction to Astronomy, Lab</td>
<td>FREN 1311, 1312 and 2311 OR</td>
</tr>
<tr>
<td>BIOL 1400 Evolutionary and Environmental Biology</td>
<td>GERM 1311, 1312 and 2311 OR</td>
</tr>
<tr>
<td>BIOL 1401 Science of Biology</td>
<td>INTR 1320, 1321 and 2320 or</td>
</tr>
<tr>
<td>CHEM 1409 Chemistry and Society</td>
<td>CHIN 1311, 1312 and 2311</td>
</tr>
</tbody>
</table>
| ERSC 1302 and 1103 Physical Geology, Lab | |}

1. At least 15 hours must be taken within the department.
2. See “Core Requirements for Bachelor Degrees” in the Policy section.
4. See “Associate Degree Requirements” for a complete list of general requirements for associate degrees.
BACHELOR OF ARTS IN CRIMINAL JUSTICE

Core Curriculum (44 hours)
Mathematics (3 hours)
MATH 1302 College Algebra
or MATH 1321 Quantitative and Math Reasoning

English (6 hours)
RHET 1311 Composition I
and RHET 1312 Composition II

History (6 hours)
HIST 1311 History of Civilization I
and HIST 1312 History of Civilization II

Speech (3 hours)
SPCH 1300 Speech Communication

World Humanities (3 hours)
One course from:
ENGL 2337 World Literature
or ENGL 2338 World Literature Themes
or PHIL 2320 Ethics and Society

Fine Arts (6 hours)
Two courses course from:
ARHA 2305 Introduction to Visual Art
MUHL 2305 Introduction to Music
DRTH 2305 Introduction to Theater and Dance

Laboratory Science (8 hours)
Two courses from:
ANTH 1415 Physical Anthropology
ASTR 1301 and 1101 Introduction to Astronomy, Lab
BIOL 1400 Evolutionary and Environmental Biology
BIOL 1401 Science of Biology
CHEM 1409 Chemistry and Society
ERSC 1302 and 1103 Physical Geology, Lab
ERSC 1303 and 1103 Historical Geology, Lab

U.S. Traditions (3 hours)
One course from:
HIST 2311 U.S. History to 1877
or HIST 2312 U.S. History since 1877
or POLS 1310 American National Government

Social and Cultural Awareness (6 hours)
Two courses from:
ANTH 2316 Cultural Anthropology
ERSC 2300 Science and Technology in Society
ECON 2301 Survey of Economics
GNST 2300 Introduction to Gender Studies
GEOG 2312 Cultural Geography
MCOM 2330 Mass Media and Society
POLS 2301 Introduction to Political Science
PSYC 2300 Psychology and the Human Experience
RELS 2305 World Regions
SOCI 2300 Introduction to Sociology

Second Language Proficiency

Criminal Justice Required Courses
(15 hours)
CRJU 2300 Introduction to Criminal Justice
CRJU 3303 Survey of Corrections
CRJU 3304 Police and Society
CRJU 4300 Crime and Behavior
CRJU 4304 Research Methods

Upper-Level Criminal Justice electives (15 hours)
Electives (19 hours) May vary with minor hours
Minor (18 hours)

Courses in Criminal Justice (CRJU)

CRJU 2300 Introduction to Criminal Justice
Basic understanding of legal and ethical foundations of criminal justice and the major components of the criminal justice system. Three credit hours.

CRJU 3105, 3205, 3305 Seminar in Criminal Justice
Prerequisite: CRJU 2300. A study of special problems, issues, or trends relating to the criminal justice system. May be repeated with a change of subject and with permission of the department chairperson. One, two, or three credit hours.

CRJU 3301 Criminal Evidence
Prerequisite: CRJU 2300. An analysis of the legal problems associated with the investigation of crime; the acquisition, preservation, presentation of evidence; principles of proof in criminal proceedings. Three credit hours.

CRJU 3302 Legal Aspects of Law Enforcement
Prerequisite: CRJU 2300. A study of the leading constitutional cases in the area of criminal justice with particular emphasis on cases dealing with search and seizure, the privilege against self-incrimination, assistance of counsel, and fair trial guarantees. Three credit hours.

CRJU 3303 Survey of Corrections
Explores the operation of the correctional system within the context of society and within the criminal justice system, the integration of criminology, the courts and corrections, the relationship the correctional system has to society, its interaction with the other components within the criminal justice system, and its historical foundations. Three credit hours.

CRJU 3304 Police and Society
This course will examine the relationship between the police and the community from several different perspectives. We will start with an introduction to the history, practices and issues related to the law enforcement function in our society, followed by an overview of police functions and responsibilities at the local, state, and federal levels. Police operations will be examined relative to effectiveness in crime control, delivery of services, and maintenance of order. We will review contemporary policy issues, programs and strategies. Finally, we will examine existing programs, problems, and potential directions as well as successes and failures in policing. Primary emphasis will be placed on community policing and its impact on policing in the 21st century. Three credit hours.

CRJU 3305 Serial Crimes
An examination of the phenomena of serial crime and the individuals who commit them. The course will examine the issue of criminal profiling. Students will be able to take a case and profile possible offenders. Secondly students will examine the concept of victimology as it applies to the investigation of crimes. Thirdly students will examine the process of investigation and the problems associated with serial crimes. Lastly students will examine the correctional considerations when dealing with serial offenders. Students will examine the explanations for the individuals who commit such crimes. Three credit hours.

CRJU 3306 Police Administration and Management
Basic understanding of the part police play within society and within the criminal justice system. Explores the relationship the police have to society, their interaction with the other components within the criminal justice system, and their historical foundations. Discusses management strategies that have been employed over the past century in policing emphasizing the daily administration of a police agency. Three credit hours.
CRJU 3307 Criminal Law  
Prerequisite: CRJU 2300. An analysis of criminal acts, elements of specific crimes, and defenses permitted in the United States legal system. Three credit hours.

CRJU 3309 Cybercrime  
Prerequisite: IFAS 2300 or consent of instructor. Designed to acquaint students with law enforcement’s response to crimes committed using computers, networks, and the internet. Three credit hours.

CRJU 3310 Race/Ethnicity and Criminal Justice  
Prerequisite: CRJU 2300. An exploration of the differing experiences of racial/ethnic groups as they come into contact with crime and the criminal justice system. Three credit hours.

CRJU 3311 Gangs  
Prerequisite: CRJU 2300. An examination of the historical, cross-cultural, and current state of gang involvement. Three credit hours.

CRJU 3312 Victimology  
Prerequisite: CRJU 2300. A review of the distribution and causes of crime from the point of view of the victim, as well as detailing the interface between victims and the legal and social service communities. Three credit hours.

CRJU 3313 Crime and Science: An Introduction to Forensic Science  
A general overview of the field of science, the application of “science,” and the scientific method to the law. Topics such as criminalistics, including firearms and toolmarks, trace evidence, fingerprints, toxicology, and biological evidence, such as serology and DNA. Forensic pathology, forensic odontology, forensic anthropology, and forensic psychology will be introduced. An experience oriented component will be provided by currently active forensic specialists. Three credit hours.

CRJU 3337 Juvenile Delinquency  
Juvenile delinquent behavior, problems, theory, cause, control and prevention. Cross listed with SOCI 3337. Three credit hours.

CRJU 3348 Internship I  
Prerequisite: consent of instructor. Experience in law enforcement agencies, juvenile courts, probation and parole departments, other correctional institutions, delinquency control programs, and public or voluntary agencies. Three credit hours.

CRJU 3349 Internship II  
A continuation of CRJU 3348. Three credit hours.

CRJU 3396 Psychology and the Criminal Process  
An exploration of the contributions of psychology to the practice of law, law enforcement, and other related areas, illustrated in terms of testimony and court procedures, psychopathology, correctional services, the development of laws, and social psychology. Three credit hours.

CRJU 4199, 4299 Criminal Justice Workshop  
Subjects vary. Sixteen hours of workshop time will equal one credit hour. One or two credit hours.

CRJU 4300 Crime and Behavior  
Enables students to identify and understand the major schools of thought in criminology and to integrate them into a comprehensive application to the real world. Three credit hours.

CRJU 4301 Judicial System and Process  
Prerequisites: CRJU 2300. A survey of state, local, and federal judicial systems and their interrelationships. Examines judicial structures, functions, and decision-making procedures. Dual-listed in the UALR Graduate Catalog as CRJU 5301. Three credit hours.

CRJU 4302 Law and Society  
Prerequisites: CRJU 2300. An examination of the origins and history of law in society, including the evolving roles of judges, juries, defense attorneys, and prosecutors. Examines the evolution of civil and criminal law, the adversary system, and the concept of justice. Dual-listed in the UALR Graduate Catalog as CRJU 5302. Three credit hours.

CRJU 4303 Readings in Criminal Justice  
Prerequisite: CRJU 2300. A survey of the current literature on crime and law enforcement, with emphasis on special research reports and periodical and journal articles in criminal justice, law sociology, and related fields. Three credit hours.

CRJU 4304 Research Methods  
Instruction in reading and comprehension of reports and research within the criminal justice field, identifying the application of various research techniques and statistical methods, and producing a draft research proposal. Three credit hours.

CRJU 4305 Juvenile Law and Process  
Prerequisite: CRJU 2300. An exploration of the philosophical basis, process, legal rights of juveniles, and roles of the major participants in the juvenile justice system. Three credit hours.

CRJU 4307 Drug Abuse  
A study of frequently abused drugs, with emphasis on the personal, social, and legal consequences of drug abuse and on the treatment of drug addiction. Three credit hours.

CRJU 4120, 4220, 4320 Independent Study  
Prerequisites: 15 hours of CRJU courses, senior standing with 3.00 GPA, consent of instructor. Advanced study and research. One, two, or three credit hours.

CRJU 4332 Corrections Psychology  
Prerequisite: CRJU 2300. A study of theoretical and applied issues in the practice of correctional psychology. Focus on relevant empirical studies and their application in a correctional context. Three credit hours.

CRJU 4333 Cooperative Education  
Prerequisite: consent of instructor. Experience in law enforcement agencies, juvenile courts, probation and parole departments, other correctional institutions, delinquency control programs, and public or voluntary agencies. Three credit hours.

CRJU 4351 Constitutional Law II  
Civil liberties, analysis of leading constitutional decisions focusing on human freedom and fundamental rights. Emphasis on religious liberty, freedom of expression, racial equality, privacy, criminal procedures and the dynamics of Supreme Court decision making. Cross listed with POLS 4351. Three credit hours.

CRJU 4380 Comparative Criminal Justice Systems  
Prerequisite: CRJU 2300. An analysis of the law enforcement, judicial, and correctional systems of other nations, with emphasis on comparison with the United States system of criminal justice. Dual-listed in the UALR Graduate Catalog as CRJU 5380. Three credit hours.
The School of Mass Communication combines the strengths of courses in radio, television, film, new media, and journalism to provide students with exposure to a broad spectrum of media studies needed in today’s information world. Students may receive a degree in Mass Communication with an emphasis in either Journalism, Public Relations/Strategic Communication, Media Production and Design, or Mass Media. If choosing the Journalism emphasis, students must select either the Newspaper and Magazine option or the Radio and Television option. If choosing the Media Production and Design emphasis, students must select either the Motion Picture option or the Media Production option. The School also offers students a variety of mass communication minors and certificate programs for students already holding the bachelor’s degree.

The School also offers a master of arts degree in journalism. See the UALR Graduate Catalog for details.

General Information

All emphases in the BA in Mass Communication are 42 hours with a required minor or cognate area to be designed by the student and his or her advisor. Each emphasis has a capstone class. Students should take their emphasis capstone course during their final semester in residence or as near to it as possible.

For returning or transfer students, skills courses completed more than five years ago may not count toward degree requirements and are subject to evaluation on a case-by-case basis. Opportunities exist to gain credit for professional experience or certification.

All material submitted by students as assignments in classes may be used for broadcast or publication. Students taking writing courses must have at least minimal word processing ability.

Students who seek a major from the School of Mass Communication may not seek a minor from the School of Mass Communication.

Honor Society

The School sponsors chapters of Kappa Tau Alpha, the national journalism scholarship society, the National Association of Black Journalists, the Public Relations Student Society of America, the National Broadcasting Society, and the Society of Professional Journalists.

Scholarships

School of Mass Communication majors are invited to apply for annual scholarships contributed by the Arkansas Democrat-Gazette, friends of Edward Jay Friedlander, friends of William K. Rutherford, Herbert and Gertrude Latkin, friends of Harry Ashmore, the family of Roy Mitchell, and Edith Wood Sweezy, the Governor Orval E. Faubus Scholarship, the Robert Hamilton Memorial Scholarship, the Irby Scholarship, the Gannett Multi-media News Producers Scholarship, the Television Broadcasters of Arkansas Scholarship, the Steve Stephens Golden Mike Award, the David M. Guerra News Scholarship, the Robert L. Brown Scholarship, the TreDay.Com Scholarship Project, and the Jerol Garrison Scholarship. Students may also apply for the following annual scholarships: Arkansas Broadcasters Association-Patricia Carter Wilcox Scholarship, the Signal Media Scholarship, the Today’s THV/Hola Arkansas Scholarship, the R.D. Doubleday Scholarship, and the Arkansas Broadcasters Association-Sam Anderson Scholarship. Scholarship opportunities may vary each year.

Facilities

The School’s facilities include a professionally equipped television studio, television field production equipment, and nonlinear editing laboratories. A computerized newsroom with computer-based production facilities is also available for student use, in addition to three computer labs for Web composition and design, graphic design, nonlinear editing, and word processing.

The School operates University Television and has cooperative arrangements with KUAR and KLRE, two public radio stations that are affiliated with the University. Students produce programs for all three media outlets.

Admission to the Mass Communication Major

After admission to UALR, any student may declare a major in Mass Communication. To discuss opportunities in the School of Mass Communication, students should visit the School director in Stabler Hall 705, or call the school at (501) 569-3250.
BACHELOR OF ARTS IN MASS COMMUNICATION

Each student in the School of Mass Communication must complete all 12 hours of the university and school core courses:

University Core (44 hours)

School of Mass Communication Core Courses (12 hours)
- MCOM 2320 Issues in Mass Media Writing
- MCOM 2330 Mass Media and Society
- MCOM 3310 Introduction to Web Principles and Design
- MCOM 3315 Mass Media Research

Journalism Emphasis (30 hours beyond the SMC Core listed above)

The Journalism emphasis prepares students to become successful writers, reporters, and editors for broadcast and print media. The curriculum is designed to prepare academically sound, technically proficient, responsible, and liberally educated graduates. The emphasis requires these courses:

- Emphasis Requirements – 9 hours
  - MCOM 2350 Beginning Reporting
  - MCOM 3365 Radio-Television Journalism
  - MCOM 4352 News Media and the First Amendment

Newspaper and Magazine Option – 21 hours
- MCOM 3320 Advanced Reporting
- MCOM 3350 Introduction to News Editing
- MCOM 4350 Design and Production
  - or MCOM 4359 Feature and Magazine Writing
- MCOM 4388 Reporting of Public Affairs

Nine hours of upper-level electives from SMC courses

Radio and Television Option – 21 hours
- MCOM 2300 Introduction to Media Production
- MCOM 3366 Electronic News Gathering
- MCOM 3367 News Producing and Anchoring
  - or MCOM 3345 Studio Production
- MCOM 4395 Electronic Media Capstone

Nine hours of upper-level electives from SMC courses

Media Production and Design Emphasis (30 hours beyond the SMC Core listed above)

The Media Production and Design emphasis is designed to provide students with the practical and theoretical knowledge needed to become effective mass media professionals and media consumers. Students will pick one of the options below. The Media Production Option is designed to give the student understanding and technical skills in the field of video and audio production. The Motion Picture Option is designed to give the student understanding and technical skills in the field of narrative and documentary motion pictures.

- Emphasis Requirements – 9 hours
  - MCOM 2300 Introduction to Media Production
  - MCOM 3360 Law, Policy, Ethics
  - MCOM 3390 Nonlinear Video Editing I
    - or MCOM 4340 Digital Graphics and Animation

- Media Production Option – 21 hours
  - MCOM 2350 Beginning Reporting
  - MCOM 3345 Studio Production
  - MCOM 4342 Cinema Techniques
    - or MCOM 4354 Documentary Techniques
  - MCOM 4332 Digital Audio Production
    - or MCOM 4385 Advanced Web Design
  - MCOM 4320 Non-Linear Video Editing II
    - or MCOM 4330 Lighting
  - MCOM 4395 Electronic Media Capstone
  - 3 hours advisor approved upper-level MCOM course

- Motion Picture Option — 21 hours
  - MCOM 2380 Principles of Strategic Communication
  - MCOM 2306 Introduction to Motion Pictures
  - Any one of the following: MCOM 3355 History of American Movies, MCOM 3356 Movie Criticism, MCOM 3357 Film Genres or MCOM 3358 Film Directors
  - MCOM 4308 Screenwriting
  - MCOM 4342 Cinema Techniques
    - or MCOM 4354 Documentary Techniques
  - MCOM 4395 Electronic Media Capstone
  - 3 hours advisor approved upper-level MCOM course

Public Relations/Strategic Communication Emphasis (30 hours beyond the SMC Core listed above)

The Public Relations/Strategic Communication emphasis prepares students who are skilled researchers, writers, and planners capable of producing messaging campaigns for a variety of audiences.

- Emphasis Requirements – 21 hours
  - MCOM 2380 Strategic Communication Principles
  - MCOM 2350 Beginning Reporting
  - MCOM 3320 Advanced Reporting
  - MCOM 3360 Law, Policy, and Ethics
  - MCOM 4380 Public Relations Writing
  - MCOM 4381 Public Relations Cases
  - MCOM 4382 Public Relations Campaigns

- Emphasis Electives – 9 hours
  - Choose one course from EACH of the three groups below:
    - Group I – 3 hours
      - ADVT 3300 Introduction to Advertising
      - MKTG 3350 Principles of Marketing
      - MCOM 4390 Mass Communication Internship
    - Group II – 3 hours
      - MCOM 4312 Management Strategies
      - MCOM 4350 Design and Production
      - MCOM 4359 Feature and Magazine Journalism
      - MCOM 4385 Advanced Web Design
    - Group III – 3 hours
      - Any other upper-level MCOM course

Mass Media Emphasis (30 hours beyond the SMC Core listed above)

The Mass Media emphasis is structured for flexibility in meeting individual needs while emphasizing the high degree of professionalism and responsibility expected in media-related industries. This emphasis is for students who want to pursue an individually-tailored course of study preparing them for careers in new media as well as traditional media areas.
After completing the 12 hour SMC Core, students in this emphasis will select 30 hours from two of the three remaining SMC emphases, with at least 21 hours in upper-level courses. Students must develop a course of study plan in consultation with their advisor prior to beginning course work. All study plans must be approved by students’ advisors. No degree plan will be considered approved until it is signed by the student’s advisor and the School of Mass Communication director.

Secondary Teacher Licensure

The School of Mass Communication also offers a Journalism Endorsement curriculum for any teacher certified in grades 7-12. The Journalism Endorsement curriculum consists of the following four courses, at least three of which must be completed at UALR:

- MCOM 2330 Mass Media and Society
- MCOM 2350 Beginning Reporting
- MCOM 3320 Advanced Reporting
- MCOM 3330 Photojournalism

Students desiring to complete one class at a campus other than UALR must obtain prior approval from the School of Mass Communication.

School of Mass Communication Minors

The School of Mass Communication offers five minors. Students majoring in the School may not minor in the School.

Minor in Journalism

A minor in journalism requires these 21 hours of courses:

- MCOM 2320 Issues in Mass Media Writing
- MCOM 2330 Mass Media and Society
- MCOM 2350 Beginning Reporting
- MCOM 3360 Law, Policy, and Ethics
  or MCOM 4352 News Media and the First Amendment
- MCOM 3365 Radio-TV Journalism

Six upper-level hours from one of the two journalism options

Minor in Media Production and Design

A minor in Media Production and Design requires these 21 hours of courses:

- MCOM 2300 Introduction to Production
- MCOM 2308 Introduction to Scriptwriting
- MCOM 2320 Issues in Mass Media Writing
- MCOM 2330 Mass Media and Society
- MCOM 3345 Studio Production
  or MCOM 4342 Movie Making Techniques
  or MCOM 4354 Documentary Techniques
- MCOM 3390 Nonlinear Video Editing I

One upper-level (3000-4000) elective from the Media Production and Design emphasis.

Minor in Strategic Communication

A minor in Strategic Communication requires the following 21 hours:

- MCOM 2320 Issues in Mass Media Writing
- MCOM 2330 Mass Media and Society
- MCOM 2350 Beginning Reporting
- MCOM 4380 Public Relations Writing
- MCOM 4381 Public Relations Cases
- ADVT 3340 Introduction to Public Relations
- MCOM 4310 Media Sales
  or MCOM 4312 Management Strategies
  or ADVT 3300 Introduction to Advertising
  or MKTG 3350 Principles of Marketing

Minor in Film

A minor in Film requires these 18 hours:

- MCOM 2306 Introduction to Motion Pictures
- Five additional film courses, at least one from outside the School.

Film courses offered in the School of Mass Communication are:

- MCOM 3355 History of American Movies
- MCOM 3356 Movie Criticism
- MCOM 3390 Non-linear Video Editing I
- MCOM 4308 Screenwriting
- MCOM 4320 Non-Linear Video Editing II
- MCOM 4330 Lighting
- MCOM 4342 Movie Making Techniques
- MCOM 4354 Documentary Techniques
- MCOM 3357 Film Genres
- MCOM 3358 Film Directors

The following could apply, depending on the subject matter:

- MCOM 4389 Independent Study in Mass Communication
- MCOM 4390 Internship in Mass Communication
- MCOM 4391 Co-op in Mass Communication

For guidance in determining which outside courses are appropriate in a given semester, please contact the School’s Film Coordinator, Ben Fry, or at (501) 569-3250.

Minor in Mass Media (18 hours)

A minor in Mass Media requires 18 hours, including the following two courses:

- MCOM 2320 – Issues in Media Writing
- MCOM 2330 – Mass Media and Society

Students seeking a minor in Mass Media must meet with an advisor in the School of Mass Communication to design a plan of study for the minor prior to beginning coursework. All minor study plans must be approved by the student’s School of Mass Communication advisor. No minor study plan will be considered approved until it is signed by the student’s SMC advisor and the School of Mass Communication director. This minor is designed for the student who is seeking study in a specific area of mass media not addressed in the other minors offered by the School of Mass Communication.

Professional Certificate in Media Production and Design

The Professional Certificate in Media Production and Design is designed to serve mid-career professionals who need to either update their skills or learn new ones given the realities of the job market and changes in the field of mass communication. Students will develop the ability to think critically about various visual and aural storytelling forms, and will be able to create visual and aural stories and information packages.

Admission Requirements

Students seeking admission into the certificate program must already possess a bachelor’s degree from an accredited institution and must meet all other admission requirements for UALR.
Program Requirements

The Professional Certificate in Media Production and Design requires 18 credit hours for completion of which the following courses are required:

- MCOM 2300 Introduction to Media Production
- MCOM 2350 Beginning Reporting
- MCOM 3310 Introduction to Web Design
- MCOM 3390 Non-linear Editing I
- MCOM 4380 Public Relations Writing

Students will select any one of the following electives:

- MCOM 3315 Mass Media Research
- MCOM 3350 News Editing
- MCOM 4320 Non-Linear Editing II
- MCOM 4342 Movie Making Techniques
- MCOM 4350 Production and Design
- MCOM 4354 Documentary Techniques
- MCOM 4385 Advanced Web Design

Graduation Requirements

Cumulative GPA of at least 2.0 on an approved program of study as outlined above.

Professional Certificate in Journalism

The Professional Certificate in Journalism is designed to serve mid-career professionals who need to either update their skills or learn new ones given the realities of the job market and changes in the field of mass communication. This certificate program will enable students to perform capably in professional print journalism settings, will develop students’ ability to think critically about media-related issues, and will help students understand the relationship between media and socio-political systems.

Admission Requirements

Students seeking admission into the certificate program must already possess a bachelor’s degree from an accredited institution and must meet all other admission requirements for UALR.

Program Requirements

The Professional Certificate in Journalism requires 15 credit hours for completion of which the following courses are required:

- MCOM 2350 Beginning Reporting
- MCOM 3320 Advanced Reporting
- MCOM 4350 Production and Design
- MCOM 4388 Reporting Public Affairs

Students will select any one of the following electives:

- MCOM 3310 Introduction to Web Principles and Design
- MCOM 4359 Feature and Magazine Journalism
- MCOM 4389 Independent Study
- MCOM 4390 Mass Communication Internship
- MCOM 4350 Production and Design
- MCOM 4354 Documentary Techniques
- MCOM 4385 Advanced Web Design

Graduation Requirements

Cumulative GPA of at least 2.0 on an approved program of study as outlined above.

Courses in Mass Communication (MCOM)

MCOM 2300 Introduction to Media Production

Required in Media Design and Production sequence. Fundamentals of audio control-room procedures, audio recording and editing, single camera field production, and video editing. Emphasis on proper use and handling of equipment. Minimal exposure to video study practices. Three credit hours.

MCOM 2306 Introduction to Motion Pictures

Basic elements of movies, the process of movie making, and the approaches to movie aesthetics and criticism. Assignments may include viewing motion pictures at local theatres. Three credit hours.

MCOM 2308 Introduction to Scriptwriting

Prerequisite: MCOM 2300 and MCOM 2320. Required in Media Design and Production sequence. Study and practice in basic writing and scripting skills needed for the production of electronic media messages and programs. Use of the SMC computer labs. Three credit hours.

MCOM 2320 Issues in Mass Media Writing

Prerequisite: RHET 1311. This course will introduce students to the general literature and issues in the convergent mass communication field, emphasizing public relations, journalism, the web, entertainment media, technology related to mass media, and the advertising that supports mass media. It will also focus on writing issues related to media. Three credit hours.

MCOM 2330 Mass Media and Society

Required in all School of Mass Communication majors and some minors. Survey of relationships involving mass media, culture, and various other interconnected systems, both nationally and globally. Includes discussion of functions, freedoms, and responsibilities of mass media and effects on individuals and groups. Topics will include newspapers, magazines, radio, television, Internet, and developing media. Three credit hours.

MCOM 2350 Beginning Reporting

Prerequisite or co-requisite: MCOM 2320. Introduction to basic news and feature writing skills. Style and story structure for print and electronic media. Laboratory instruction and practice in writing for publication. Three credit hours.

MCOM 2380 Strategic Communication Principles

An examination of the evolution of strategic communication, its impact on organizations and publics, the principles, processes, theory and planning that directs strategic communication in all fields as well as the ethics and values that an organization must use to shape successful implementation of a strategic communication plan.

MCOM 3310 Introduction to Web Principles and Design

Prerequisites: MCOM 2320, and MCOM 2350 or MCOM 2308. This course will introduce students to web design and development from the mass-communication perspective. It will serve as an introduction to the World Wide Web, and basic web design techniques. The course concentrates on history, social implications, navigation, authoring, and basic validation and submission of information across the Internet. In addition to theoretical and analytical foundations, the primary technologies employed are HTML 4.x; SHTML; Cascading Style Sheets; File Transfer Protocol; and Document Object Modeling. Three credit hours.

MCOM 3315 Mass Media Research

Prerequisite: Grade of C or greater in MCOM 2320 and MCOM 2330. This course will introduce students to a survey of research methods and their application in the study of mass communication. Students will also receive practice in determining the appropriate choice of research method for a mass communication problem of their choosing. Three credit hours.

MCOM 3320 Advanced Reporting

Prerequisites: MCOM 2320 and MCOM 2350. Application of principles of news writing to journalism practice; development of skills in evaluating the news, interviewing, and gathering information. Laboratory instruction and practice in objective reporting. Materials submitted as assignments are subject to dissemination through print and broadcast media and on the World Wide Web. Three credit hours.

MCOM 3330 Photographic Journalism

Fundamentals of news and feature photography for newspaper, magazine, and the Web. Materials submitted as assignments are subject to publication. Use of the SMC computer labs. Three credit hours.
MCOM 3345 Studio Production
Prerequisite: MCOM 2300. A practical study and application of video production with an emphasis on studio and multi-camera productions. Three credit hours.

MCOM 3350 Introduction to News Editing
Prerequisites: MCOM 2320 and MCOM 2350. Introduction to news editing. Instruction and practice in print audio and video editing in terms of content and style. Use of computers to edit copy and images; fundamentals of design for print and online media. Three credit hours.

MCOM 3355 History of the American Movies
History and development of the American entertainment motion picture industry from the technological to the aesthetic and social to the economic perspectives. Includes the evolution of the motion picture industry as it relates to audience uses and gratifications. Three credit hours.

MCOM 3356 Movie Criticism
Criticism of contemporary movies, concentrating on the creative elements used in the service of aesthetics and the application of scholarly and popular critical standards. Certain historical references are included. Assignments include the viewing of motion pictures at local theatres. Three credit hours.

MCOM 3357 Film Genres
History and development of film genres, focusing on defining different genres, observing their iconography, recognizing the conventions used and understanding their cultural impact. Also, an analysis of the Hollywood style of filmmaking and its impact on genre pictures.

MCOM 3358 Film Directors
This course will examine how film directors imprint their life, style and thematic interests on the films they make. The work of major directors from classic Hollywood, overseas and contemporary America will be studied.

MCOM 3360 Law, Policy, Ethics
Prerequisites: MCOM 2320, and MCOM 2330 (may be taken concurrently). This course will examine current legal, policy, and ethical issues affecting the broadcast, cable, print, and interactive media. Three credit hours.

MCOM 3365 Radio-Television Journalism
Prerequisites: MCOM 2300, MCOM 2320. MCOM 2350 may be taken as prerequisite or corequisite. MCOM 2300 is recommended but not required as a prerequisite. The course provides study and practice in the basic methods of writing and producing for radio and television news. The course will also evaluate audio and video streaming of material on news-related websites, and may include having student work presented online. Three credit hours.

MCOM 3366 Electronic News Gathering
Prerequisites: MCOM 2300, MCOM 2320, MCOM 2350, MCOM 3365, MCOM 3367, and MCOM 3370. MCOM 3315 is strongly recommended as a prerequisite, but is not required. Production of programs for the electronic media. Students function individually and on news teams to develop high quality on-the-air news programs, with video streaming of appropriate student work and some use of the Web for research. Three credit hours.

MCOM 3367 News Producing and Anchoring
Prerequisites: MCOM 2300, MCOM 2320, MCOM 2350, and MCOM 3365, or consent of instructor based upon documented media experience. This purpose of the course is to teach students the rudiments of radio and television newscast producing and anchoring, emphasizing TV. Students will be encouraged to develop critical thinking skills about selecting and organizing news material and graphics, writing and delivering stories, and managing, timing and promoting newscasts. Three credit hours.

MCOM 3370 Announcing and Performance
Prerequisite: MCOM 2320 or consent of instructor based upon prior media experience. Development of performance skills necessary for effective communication via the electronic media. Emphasis on announcing and visual presentation techniques, script reading, and adapting to the demands of electronic media technologies. Three credit hours.

MCOM 3370 Announcing and Performance
Prerequisite: MCOM 2320 or consent of instructor based upon prior media experience. Development of performance skills necessary for effective communication via the electronic media. Emphasis on announcing and visual presentation techniques, script reading, and adapting to the demands of electronic media technologies. Three credit hours.

MCOM 3380 Mass Communication Practicum
Prerequisite: junior standing. Work experiences in on-campus media under the direction of a School of Mass Communication professor. Periodic written and oral reports to the professor coordinating the study. Three credit hours.

MCOM 3390 Non-linear Video Editing I
Prerequisite: MCOM 2300. The basics of non-linear editing and use of Adobe Premier software. Three credit hours.

MCOM 4308 Screenwriting
Prerequisite: Mass Communication majors must have completed MCOM 2320 and MCOM 2330 with a C or greater. No prerequisites for Film minors. Learn the process, structure and skills used in writing minor picture screenplays. Three credit hours.

MCOM 4310 Media Sales
Prerequisites: MCOM 2320 and MCOM 2330. Examination of the elements, skills and strategies associated with selling broadcasts, cable, print, and interactive advertising. Three credit hours.

MCOM 4312 Management Strategies
Prerequisite: MCOM 2310 and MCOM 2330. Roles and responsibilities of media managers in broadcast, cable, print, and interactive organizations. Emphasis on coordinating work units and personnel, legal obligations, resource generation and management, public relations, and the new technologies. Dual-listed in the UALR Graduate Catalog as MCOM 5312. Three credit hours.

MCOM 4320 Non-linear Video Editing II
MCOM 2300, and MCOM 3390. A practical study of non-linear editing in the field of video production. Three credit hours.

MCOM 4330 Lighting
Prerequisite: Grade of C or greater in MCOM 2300. This course will provide students with a practical study and application of lighting techniques for video production. Students will learn studio and location lighting. Three credit hours.

MCOM 4332 Digital Audio Production
Prerequisites: MCOM 2320, MCOM 2300 and MCOM 2330 with a C or greater. Study and practice in advanced audio preproduction, production, and post-production elements used in radio, television, the Internet and other electronic media. Three credit hours.

MCOM 4340 Introduction to Digital Graphics and Animation
Prerequisites: MCOM 2300, and MCOM 3390. This course is designed to encompass a basic understanding of design elements of Adobe Photoshop and After Effects. Students will be exposed to a variety of photographic challenges geared toward creative problem solving and real-life experience in video production presentation. Three credit hours.

MCOM 4342 Cinema Techniques
Prerequisite: MCOM 2300 and MCOM 3390. A practical study and application of video production with an emphasis on movie making techniques. The class will start out making a movie together then, with skills learned, will proceed to make their own movies in groups. Three credit hours.

MCOM 4350 Design and Production
Prerequisites: junior standing and MCOM 2320 or consent of instructor. Decision-making in the editing process. Principles of typography, publication design, and printing processes. Experience in the use of computers to design camera-ready materials for publication. Dual-listed in the UALR Graduate Catalog as MCOM 5350. Three credit hours.
MCOM 4357 Seminar in Radio-Television Journalism
Prerequisite: Junior standing. Broadcast news policies; history; governmental and other forms of regulation; social implications; influence of various publics on radio- and television news coverage. Dual-listed in the UALR Graduate Catalog as MCOM 5357. Three credit hours.

MCOM 4359 Feature and Magazine Journalism
Prerequisite: MCOM 3320 and MCOM 2350. Planning, researching and writing the feature article for newspapers, magazines, and online publications. Emphasis on humanistic reporting and providing a context for the news through thorough research and application of this research to the article. Materials submitted as assignments are subject to publication. Dual-listed in the UALR Graduate Catalog as MCOM 5359. Three credit hours.

MCOM 4375 Journalistic Freedom and Responsibility
Prerequisite: Junior standing. Journalistic ethics and practices; professional conduct and responsibilities of the journalist in a free society. Dual-listed in the UALR Graduate Catalog as MCOM 5375. Three credit hours.

MCOM 4380 Business Strategy and Policy
Prerequisites: MGMT 1310, MGMT 3300, MGMT 3304, MGMT 3380, ECON 2312 or ECON 3355, FINC 3310, MKTG 3350, and be an officially accepted College of Business major. Integration of business concepts and techniques and their application to the development of corporate strategy and strategic planning by senior corporate executives. Includes setting objectives, developing business purposes, determining opportunities and threats, and implementing decision and control systems across functional areas. Three credit hours.

MCOM 4381 Public Relations Cases
Prerequisites: ADVT 3340, MCOM 2330, MCOM 2320, MCOM 2350; corequisite: MCOM 3315. Study of recent public relations cases involving business, industry, institutions and government. Students will also be introduced to public relations theories as they are applied in case studies and will analyze cases in terms of the component parts. Three credit hours.

MCOM 4382 Public Relations Campaigns
Prerequisites: ADVT 3340, MCOM 2320, MCOM 2350, MCOM 3315, MCOM, 4380, MCOM 4381, or consent of instructor. Capstone course for the Strategic Communication sequence. A study of the planning and implementation of the public relations campaign with special emphasis on the application of public relations principles introduced in ADVT 4310. Includes student service learning project. Three credit hours.

MCOM 4384 Topics in Mass Communication
Prerequisite: Junior standing and/or consent of instructor. Advanced and specialized topics in mass communication, especially those of current interest and relevance to mass communication professionals. Possible subjects include the following: journalism, entertainment, production and design, Web and media, strategic communication, mass media etc. Classes will provide an in-depth understanding of topics chosen. Refer to the semester schedule for specific topics offered. Dual-listed in the UALR Graduate Catalog as MCOM 5384. Three credit hours.

MCOM 4385 Advanced Web Design
Prerequisites: MCOM 2320, MCOM 2350, or MCOM 2308. This course will serve as part two in a sequence of courses dealing with mass communication and the World Wide Web. A specific concentration in server communication and publishing corporate web pages, as well as using basic programming logic combined with HTML. Three credit hours.

MCOM 4388 Reporting of Public Affairs
Prerequisites: MCOM 2320, MCOM 2350, and MCOM 3320. MCOM 3315 and MCOM 3360 may be taken as prerequisites or corequisites. Class may also be taken with consent of instructor based upon demonstrable advanced media experience. Practice in gathering materials and writing in-depth stories on public affairs; emphasis on courts, police, government, education, ecology, the economy, and social issues. Materials submitted as assignments are subject to online postings. Dual-listed in the UALR Graduate Catalog as MCOM 5388. Three credit hours.

MCOM 4189, 4289, 4389 Independent Study
Prerequisites: Junior standing, consent of instructor, approval of independent study proposal before registration. Individual in-depth study, research, or designated on-campus practicum related to broadcast journalism, news-editorial, public relations options, or professional and technical writing. Up to three hours may be counted toward the major. One, two, or three credit hours.

MCOM 4386 Images of Minorities in the Media
This course examines the material and ideological representations of various racial and ethnic groups in the United States as reflected in the media including both historical and contemporary depictions. Students explore theories including racial formation, otherness, and commodification among others. In this course, students learn the origins of ideological and material representations of minorities; how they are maintained in the culture and in the media; the similarities and differences in depictions among and across racial and ethnic groups; and the impact of these representations on the various minority groups and society as a whole.

MCOM 4390 Mass Communication Internship
Prerequisites: Senior standing, consent of school director. Work experience either in the commercial media or in other designated media under the direction of a mass communication professional. Periodic written and oral reports to the professor coordinating the study. Three credit hours.

MCOM 4391 Mass Communication Cooperative Education
Prerequisites: Junior standing, consent of school director and director of cooperative education. Work experiences either in the commercial media under direction of professional journalists or in positions under supervision of public relations specialists. Periodic written and oral reports to the professor coordinating the study. Credit awarded for employment involving at least 20 hours per week and successful completion of specific instructional objectives that provide new learning on the job and in the major. Students who take this course may not take MCOM 4390. Three credit hours.

MCOM 4395 Producing and Directing
Prerequisites: Senior standing and consent of the instructor. Production of programs for the electronic media. Students work individually and on news teams to develop high quality electronic news and information programs to be distributed on the University's cable television channel and the School of Mass Communication's web sites via video streaming when appropriate. Three credit hours.
The goal of the Department of Military Science is to provide leadership, citizenship, and management training while introducing basic military skills; and in conjunction with the goals of UALR, to develop individual attributes essential to an Army officer. Instruction covers a broad base of leadership, management, and military fundamentals. The basic course is open to all students. Students incur no military obligation for participation in the basic course.

General Information

Enrollment in military science courses is based on the following requirements:

- A student must enter the University and remain at or above the University probationary level.
- When contracted by the Department of Military Science, normally at the start of the junior year, a student must have a cumulative grade point average of at least 2.00.
- Qualified students may participate in the Reserve Officer Training Corps (ROTC) commissioning program. On successful completion of this program the graduate is commissioned as a Second Lieutenant in the United States Army, Army Reserve, or National Guard.

The ROTC program is essentially a four-year sequence consisting of two parts: Basic, the freshman and sophomore years; and Advanced, the junior and senior years. Successful completion of the Basic courses is a prerequisite for Advanced course enrollment. However, up to two years of credit in the four-year ROTC program can be awarded for acceptable prior military service, current membership in the Reserves or National Guard, ROTC Basic Camp, or three years of Junior ROTC. Students may enroll in the Military Science I and Military Science II classes concurrently, or take Military Science II prior to Military Science I with instructor approval. Students are encouraged to talk with the chairperson of military science to determine their enrollment status.

Students enrolled in military science are furnished with all required books, uniforms, and equipment. Participation in the Basic course is voluntary; students incur no military obligation. Participation in the Basic course functions to familiarize students with different aspects of military life and leadership techniques. Students selected for the Advanced program who formally enroll in the Advanced course receive a $450 per month stipend.

Two and three-year scholarships (up to $20,000) are available to students who are strongly motivated toward a career in the Army. This scholarship pays for tuition, $1,200 per year for books, fees, and provides a $300 per month stipend. Recipients must agree to enroll in the Advanced program and serve on active duty as an officer if selected. Applicants do not have to be enrolled in military science in order to apply.

Four-year scholarships are available to high school seniors who have demonstrated leadership potential. Scholarship pays for tuition, $1,200 per year for books, fees, and provides a minimum of $300 per month for the duration of the award. This scholarship is awarded by the Department of the Army during the student’s senior year of high school. Interested students should contact their high school counselor, the ROTC department, or the ROTC website http://ualr.edu/rotc/ for more information.

Registration for military science courses is accomplished at the same time and in the same manner as registration for other courses.

Minor in Military Science (18 hours)

Upper-level military science courses (12 hours)

Other Courses (6 hours)

- CPSC 1370 Computer Literacy

One of the Following Courses:

- HIST 2311 U.S. History to 1877
- or HIST 2312 U.S. History since 1877
- or POLS 1310 American National Government

The military science minor gives the student a basic knowledge of the leadership, the military environment, written communication, management, international relations, and military history necessary for a member of the military profession.

Military Leadership Lab

Prerequisite: enrollment in the appropriate level of the Military Science Program. Emphasis is on continued instruction and practical application of military fundamentals learned in the classroom. The course is designed to develop individual character, leadership abilities, and other attributes essential to an officer and a leader.
Courses in Military Science (MSCI)

MSCI 1101 Leadership
Emphasis on the importance of communication, decision making, and the understanding of human behavior as it affects leadership situations. Two hours laboratory per week is required. One credit hour.

MSCI 1102 Leadership II
A continuation of MSCI 1101 which focuses on leadership development and basic tactical skills. Two hours laboratory per week required. One credit hour.

MSCI 2304 Introduction to Military Organization/Tactics I
An introduction to the military organization and a study of basic tactics. One hour laboratory per week. Two credit hours.

MSCI 2305 Map Reading
An introductory course studying all aspects of land navigation, including military and topographic maps, aerial photographs, and photomaps. Practical exercises are emphasized. One hour laboratory per week. Two credit hours.

MSCI 3305 Advanced Leadership and Tactics I
An in-depth study of unit tactics and related individual skills, advanced map reading, and their practical application. Emphasis on person-to-person leadership skill development. Two hours laboratory per week. Three credit hours.

MSCI 3306 Advanced Leadership and Tactics II
A continuation of MSCI 3305. Two hours laboratory per week. Three credit hours.

MSCI 4307 Applied Leadership and Management I
A study of command and staff functions and practical exercises in planning, organizing, and supervising. Students plan and administer all activities of the cadet corps. Emphasis on leadership and management of larger organizations. Two hours laboratory per week. Three credit hours.

MSCI 4308 Applied Leadership and Management II
A continuation of MSCI 4307. Two hours laboratory per week. Three credit hours.
Courses in Public Administration (PADM)

**PADM 3310 Policy Process**
See POLS 3310. Three credit hours.

**PADM 3331 Public Administration**
Prerequisite: POLS 1310 or junior standing. Trends and organization of public administration; fiscal and personnel management; administrative powers and responsibility. Three credit hours.

**PADM 4313 Public Personnel Administration**
Analysis of the policies, practices, and issues of public personnel administration, including recruitment and selection processes, classification and pay plans, training, career management, separation, grievances and appeals, and unionization and collective bargaining. Three credit hours.

**PADM 4341 Seminar: Comparative Public Administration**
Prerequisite: senior standing. A seminar survey of similarities and differences in bureaucratic structures and processes. Analysis of the organization, staffing, and role of administrative systems in contrasting social and cultural contexts of the Western and non-Western worlds. Dual-listed in the UALR Graduate Catalog as PADM 5341. Three credit hours.

**PADM 4353 Seminar in Budgeting**
Prerequisite: POLS 1310. The course covers budgeting theory and practice. Topics include budgeting as allocations, process games, rituals, history, and politics. It examines institutions and their roles in budgeting as well as current issues such as uncontrollability, balanced budgets, and variance budgeting. Dual-listed in the UALR Graduate Catalog as PADM 5353. Three credit hours.

Courses in Poverty Studies

**PVYS 2301 Introduction to Poverty Studies**
This course serves as an introduction to a multidisciplinary study of poverty, including emphases on causes and effects of poverty, values, moral, and legal issues related to poverty, and difficulties in breaking the cycle of poverty. Three credit hours.

**PVYS 2302 Poverty Reduction Strategies**
Prerequisite: PVYS 2301. In response to the incidence of poverty, both in urban and rural areas, this course equips the student with analytical tools that aid in the planning, design, and implementation of anti-poverty strategies. Macro and micro approaches include individual counseling and prevention tactics, policy making, continua of care, community development, and community collaboration. The course is required for Shepherd Scholars. Three credit hours.

**PVYS 3301 Service-Learning Placement I**
Prerequisite: PVYS 2301, 2302 and admission to the Shepherd Scholars program. In this intensive fieldwork course, Shepherd Scholars will be placed with an agency in either an urban or rural poverty situation where they will be integrated into the work of that organization. Successful completion requires at least four weeks (160 contact hours) and both written and oral reflection presentations. Three credit hours.

**PVYS 3302 Service-Learning Placement II**
Similar to PVYS 3301, this course offers Shepherd Scholars with an intensive fieldwork opportunity. Students will be placed with an agency in either an urban or rural poverty situation where they will be integrated into the work of that organization. Successful completion requires at least four weeks (160 contact hours) and both written and oral reflection presentations. Prerequisite: PVYS 2301, 2302, and 3301 and admission to the Shepherd Scholars program. Three credit hours.

**PVYS 4301 Seminar in Poverty Studies**
This capstone course is conducted as a seminar in which students play a lead role along with the instructor in discussions of readings, papers, and presentations. It is designed to challenge students to propose, research, and write a major paper on poverty and its reduction. Topics may derive from any relevant discipline and will be selected in consultation with a participating instructor who will serve as a preceptor. Three credit hours.
The Bachelor of Social Work (BSW) program is a major (120 hour degree) which provides the foundation for a professional career in social work. The program’s principal educational objective is to prepare students for beginning generalist social work practice within a liberal arts perspective to address the human service needs of diverse client populations. The program focuses on developing and advancing the knowledge base, practice skills, and value system of students so they are able to further the well-being and functioning of people, especially those who live in poverty or have been otherwise marginalized in society, and to promote social and economic justice.

A student can declare a social work major as early as his or her freshman year. No minor is required. Application for full admission into the program may be made when the student is nearing completion of 53 credit hours, forty of which are in the core curriculum. Other requirements for admission include overall cumulative GPA of 2.5 and a cumulative GPA of 2.5 in the following prerequisite courses: SOWK 1301 and 15 credits from the following courses: SOWK 3302, SOWK 3303, SOWK 3304, SOWK 3313, SOWK 3314, SOWK 3322, SOWK 3331, and SOWK 3381. In order to minor in social work, students must have been admitted to the BSW Program, have successfully completed any course they wish to count towards the minor with a grade of C or above, and have a 2.5 GPA in all social work courses. It should be noted that the Council on Social Work Education, the accrediting body for social work education, does not recognize a minor in social work. Consequently, no professional privileges or practice rights will stem from the minor in social work and the students who minor in it will not graduate with the BSW degree.

Minor in Gerontology

A minor in gerontology requires 18 credit hours of gerontology, including GERO 2300, 4315, 4336, and 4346. GERO 4385 Topics Seminar may be taken twice with different topics, or GERO 4390 Directed Study may serve as one of the requirements. A pre-approved course with aging content in another discipline can be substituted for one of the topics seminars. For more information, consult the Gerontology Coordinator in the School of Social Work.
Bachelor of Social Work Degree Requirements

Core Requirements (44 hours) including
BIOL 1401 Science of Biology
PSYC 2300 Psychology and the Human Experience
SOCI 2300 Introduction to Sociology

Second Language Requirement (6 hours)

Required Social Work Courses (50 hours)
SOWK 1301 Introduction to Social Work
SOWK 3302 Social Work and Diversity
SOWK 3303 Human Behavior in the Social Environment I
SOWK 3304 Human Behavior in the Social Environment II
SOWK 3313 Social Welfare Policy I
SOWK 3314 Social Welfare Policy II
SOWK 3315 Policy Practice
SOWK 3322 Methods of Social Work Research
SOWK 3331 Social Work Practice I
SOWK 3332 Methods of Social Work Research II
SOWK 3333 Social Work Practice III
SOWK 3334 Social Work Practice IV
SOWK 3381 Statistics for Social Workers
SOWK 4212 Field Seminar I
SOWK 4213 Field Seminar II
SOWK 4541 Field Experience I
SOWK 4542 Field Experience II
Other Required Courses (6 hours)
PSYC 3360 Abnormal Psychology
RHET 3301 Editing for Usage, Style, and Clarity
RHET 3315 Persuasive Writing
RHET 3326 Technical Writing

Electives (18 hours)
Twelve hours upper-level (3000-4000) electives in a field related to social work (see program advisor)
Two hours unrestricted electives
1. To proceed in the BSW program, students must receive a grade of C or greater in this course.
2. To proceed in the BSW program, students must receive a grade of B or greater in this course.

Courses in Social Work

SOWK 1301 Introduction to Social Work
This course focuses on the major concepts and principles of professional social work, including: the development of social welfare; the history of social work; the knowledge, skills, and values base of social work; models of social work methods; and current social work practice applications. The course also looks at the basis of knowledge from which the theories of social justice and diversity arise and lays a foundation for social workers’ professional entry into both public and private arenas. Three credit hours.

SOWK 3302 Social Work and Diversity
Prerequisites: formal admission to the social work program and completion of SOWK 1301 with a grade of “C” or above. This course focuses on the strengths and challenges faced by different groups including but not limited to gay, lesbian, and bisexual individuals; people of color; people with disabilities; religious minorities; and the elderly. Students will learn about the characteristics of culturally competent social work practice with diverse populations and the knowledge, attitudes, and skills for working with different population groups. Three credit hours.

SOWK 3303 Human Behavior in the Social Environment I
Prerequisites: formal admission to social work and SOWK 1301 with a grade of “C” or above. Part one of a two-course sequence, this course provides students with the content necessary to understand the complexities of human development and behavior. Students learn to evaluate various social environmental influences that affect human behavior and functioning as well as the ways in which the social environment can impede or promote well-being. Particular attention is paid to life span development of infancy, early childhood and adolescence as well as highlighting issues of oppression, privilege and discrimination. Three credit hours.

SOWK 3304 Human Behavior in the Social Environment II
Prerequisites: formal admission to social work and SOWK 1301 and 3303 with a grade of “C” or above. Part two of a two-course sequence, this course continues to analyze theories of the development and behavior of individuals, families, communities, groups, and organizations, as well as the interactions of these systems with and among one another in larger socio-cultural environments. Particular attention is paid to life span development of young adulthood, middle adulthood and older adulthood. Three credit hours.

SOWK 3313 Social Welfare Policy
Prerequisites: Formal admission to the social work program or human services minor and SOWK 1301 with a grade of “C” or above. Part one of a two-course sequence, this course examines policy-making in the governmental context. The process at the local, state, regional and national levels will be reviewed and service and benefits entitlements provided under these policies will be summarized. The history, organization, guiding principles and resulting programs that govern major social welfare institutions will be explored. Theories of social justice will be studied to understand the phrasing of policy claims and their assessment. Three credit hours.

SOWK 3314 Social Welfare Policy II
Prerequisites: formal admission to social work and SOWK 1301 and 3313 with a grade of “C” or above. Part two of a two-course sequence, this course explores topics such as (1) history and current structures of social welfare services, (2) the role of policy in service delivery and in social work practice, (3) attainment of individual and social well being, and (4) comparative and international social welfare. The course also emphasizes understanding of current developments in social welfare, factors affecting the structure and dynamics of social welfare policies/services as well as understanding the role of the social work profession within that framework. Additionally, models for analyzing social welfare policy are introduced, and students apply these models to past policy decisions and current issues. Three credit hours.

SOWK 3315 Policy Practice
Prerequisites: SOWK 3313, SOWK 3314, and formal admission to the social work program. Training student social workers to engage in policy practice. Oriented to the creation of the professional skills associated with policy action. Conceptualizes policy action as a series of skill areas that start with problem identification and analysis and conclude with policy proposal, action planning, and mobilization of political and public support. Three credit hours.

SOWK 3322 Methods of Social Work Research
Prerequisites: MATH 1302 or MATH 1315, and formal admission to the social work program. An overview of the approaches to and uses of research in generalist social work practice. Emphasis placed on the practice-research link with a focus on conducting practice and program evaluation within a social work agency setting. Ethical and human diversity issues are considered throughout the course. Three credit hours.
SOWK 3331 Social Work Practice I
Prerequisites: SOWK 3303, and formal admission to the social work program. This is the first course in a three-course practice sequence, introduces the student to therapeutic relationship building, interviewing, and client-system assessment. The primary objective of the sequence is to prepare students to engage in culturally-competent, family-centered practice which incorporates a strengths perspective needed for practice with individuals, families, groups, organizations, and communities. Three credit hours.

SOWK 3381 Statistics for Social Workers
Prerequisite: SOWK 1301, formal admission to the social work program. This course is an introduction to statistics and their use in analyzing and interpreting data. The course is designed to teach students statistics applicable to social work practice and decision-making. In particular, it is an introduction to probability, descriptive statistics, and beginning inferential statistics. The course covers basic descriptive statistics and introduces the student to hypothesis testing and bivariate statistics. Students will use the knowledge of statistics learned in this course to interpret and critique statistical analyses published in journal articles. Students will also analyze real data, interpret the findings and write reports. Three credit hours.

SOWK 4212 Field Seminar I
Prerequisites: formal admission to BSW program; a “C” or better in SOWK 1301, 3303, 3304, 3313, 3314, 3302, 3331; a 2.5 cumulative GPA in all social work courses taken to date; a 2.5 overall GPA; and formal admission to the Field Experience. Corequisite: SOWK 4341/4541. Pre or corequisite: SOWK 4332. Field Seminar I is the first of a two course seminar that provides the student with the opportunity to integrate knowledge and insights developed in the classroom by exploring the field experience through the group process. The practice model of engagement, assessment, planning, implementation, evaluation and termination is the basis for student learning and self-evaluation. This course introduces the student to “use of self” within the group context and utilizes presentations, case consultations, group process, agency resources, ethical dilemmas, and personal development to achieve professional awareness and identity. Student must receive a “B” or higher to move on to Field Seminar II. Two credit hours.

SOWK 4190 Independent Study
Prerequisites: SOWK 1301, formal admission to the social work program, and consent of instructor. Advanced study and assignments in selected areas of social work. One credit hour.

SOWK 4213 Field Seminar II
Prerequisites: formal admission to BSW program; a “C” or better in SOWK 1301, 3303, 3304, 3313, 3314, 3302, 3331; a “B” in SOWK 4212 and 4341/4541; a 2.5 cumulative GPA in all social work courses taken to date; a 2.5 overall GPA; and formal admission to the Field Experience. Corequisite: SOWK 4342/4542. Pre or corequisite: SOWK 4333. Field Seminar II is the second of two seminars that provide the student with the opportunity to integrate knowledge and insights developed in the classroom by exploring the field experience through the group process. The Generalist Intervention Model of engagement, assessment, planning, implementation, evaluation and termination is the basis for student learning and self-evaluation. Seminar II builds on the strengths and experience of Seminar I to further student development toward full integration of knowledge, skills and values in generalist practice. Group discussion and process, the basis and coordination of skills, establishment of values, collaboration with colleagues, and community visits provide the framework to identify as a professional social worker. Student must receive a “B” or higher to move on to graduate. Two credit hours.

SOWK 4290 Independent Study
Prerequisites: SOWK 1301, formal admission to the social work program, and consent of instructor. Advanced study and assignments in selected areas of social work. Two credit hours.

SOWK 4330 Animal Assisted Therapy
Prerequisite: junior status. Course provides an overview of the interdisciplinary field of animal-assisted therapy and the human-animal bond. Course will include observations of AAT visits to human service settings and web-enhanced classes. Three credit hours.

SOWK 4332 Social Work Practice II
Prerequisites: SOWK 3331. The second in the three-course sequence, this course builds on the foundation interviewing and client-system assessment skills by introducing students to various intervention skills to be used with individuals, groups, communities, and in family-centered practice. The focus is on generalist practice utilizing problem-solving and solution-focused techniques. Skills learned in this course are integrated with actual practice experience through the SOWK 4541 Field Experience I and SOWK 4212 Field Seminar I. Three credit hours.

SOWK 4333 Social Work Practice III
Prerequisites: SOWK 4332. The third in the three-course sequence, this course builds on the foundation interviewing and client-system assessment skills presented in Practice I and the various intervention skills to be used with individuals, groups, communities, and in family-centered practice, which were the focus of Practice II. Practice III introduces methods for terminating a client from service by focusing on final empowerment strategies and strategies for program and practice evaluation. The focus on program and practice evaluation, in correlation with social work values, will integrate research methods into the professional world of practice. Skills learned in this course will also help to prepare the student for supervisory and managerial positions within the agency arena and are integrated with actual practice experience through the SOWK 4542 Field Experience I and SOWK 4213 Field Seminar I. Three credit hours.

SOWK 4341/4541 Field Experience I
Prerequisites: formal admission to BSW program; a “C” or better in SOWK 1301, 3303, 3304, 3313, 3314, 3302, 3331; a “B” in SOWK 4212 and 4541; a 2.5 cumulative GPA in all social work courses taken to date; a 2.5 overall GPA; and formal admission to the Field Experience. Corequisite: SOWK 4542. Pre or corequisite: SOWK 4332. Field Experience I is the first of two opportunities for the student to integrate knowledge and values acquired in the classroom into practice by observing and engaging with the client system under supervision of a social worker in a human services agency. The introduction of the student to direct practice will involve the elements of the generalist intervention model: engagement, assessment, planning, implementation, evaluation, and termination. Field Experience I provides a structured learning environment in which professional ethics, critical thinking, generalist practice, and applicable skills are explored for greater depth and application. The corequisite SOWK 4212, Field Seminar I, is offered concurrently with Field Experience I for in-depth consultation with other students and seminar instructor to allow feedback and consultation in a group process. SOWK 4541 is 240 hours in the field setting in the fall semester of the senior year for five credits. The student must receive a “B” in order to progress to Field Experience II.
SOWK 4342/4542 Field Experience II
Prerequisites: formal admission to BSW program; a “C” or better in SOWK 1301, 3303, 3304, 3313, 3314, 3302, 3331; a “B” in SOWK 4212 and 4341/4541; a 2.5 cumulative GPA in all social work courses taken to date; a 2.5 overall GPA; and formal admission to the Field Experience. Corequisite: SOWK 4342/4542. Pre or corequisite: SOWK 4333. Field Experience II is the second of two opportunities for the student to integrate knowledge developed in the classroom into practice by working directly with the client system under supervision of a social worker. Field Experience II provides a structured learning environment in which professional ethics, critical thinking, generalist practice, and applicable skills are explored for greater depth and application. The corequisite SOWK 4213, Field Seminar II, is offered concurrently with Field Experience II for in-depth consultation with other students and seminar instructor to allow feedback and consultation in a group process. SOWK 4542 is 240 hours in the field setting in the spring semester of the senior year for five credits. The student must receive a “B” in order to graduate from the social work program.

SOWK 4390 Independent Study
Prerequisites: SOWK 1301, formal admission to the social work program, and consent of instructor. Advanced study and assignments in selected areas of social work. Three credit hours.

Courses in Gerontology (GERO)

GERO 2300 Introduction to Aging and the Elderly
Prerequisites: RHET 1311 and 1312 or equivalents. SOCI 2300 or PSYC 2300 recommended. An overview of the aged as they relate to their social environment, with emphasis on the biological, psychological, and sociological aspects of aging. Three credit hours.

GERO 4315 Interdisciplinary Health Care of the Elderly
Designed to increase clinical knowledge, skills, and attitudes of students in the health professions and other fields related to health promotion and maintenance for the elderly. In-depth exploration of the multiple factors associated with the physiological process of aging, psychosocial developmental tasks, and typical environments of aged persons. Dual-listed in the UALR Graduate Catalog as GERO 5315. Three credit hours.

GERO 4336 The Social Aspects of Death and Dying
An exploration of the subject of dying and death in contemporary society. Emphasis is on the psychological and social correlates of death. The dynamics of the grief process and issues of ethics of life support are explored. Dual-listed in the UALR Graduate Catalog as GERO 5336. Three credit hours.

GERO 4346 Family in Late Life
Prerequisite: GERO 2300. Family life of the elderly, including late-life marital relationships; widowhood and living alone; relations with children, grandchildren, siblings, and other kin; alternative and innovative lifestyles; family neglect and abuse of the elderly; and demographic and structural changes in the family and society that affect these matters. Exploration of dynamic and therapeutic models of family problems and process to provide a foundation of concepts for later training in counseling families with elderly members. The family as a natural support system for the elderly, along with the potential and limitations of such a system in a context of community support networks, will be core concepts. Dual-listed in the UALR Graduate Catalog as GERO 5346. Three credit hours.

GERO 4385 Topics Seminar
Prerequisite: consent of instructor. Special topics of critical and current interest to those interested and involved in the aging field. Topics range from Social Security, legislation affecting the elderly, and targeted programs to clinical and research developments in aging and life-span developmental issues. May be taken more than once under different topics. Dual-listed in the UALR Graduate Catalog as GERO 5385. Three credit hours.

GERO 4190, 4290, 4390 Directed Study
Prerequisites: junior or senior standing; GERO 2300 or consent of instructor. Study directed by a faculty member in a content area or competency relevant to research on aging or practical matters in connection with the elderly. May include field placement at an agency working with or for the elderly. Forty-five clock hours of study or of work on-site (in field placements) per credit hour is presumed. One, two, or three credit hours.
The department develops the knowledge, appreciation, and skills that contribute to the full understanding and practice of effective interpersonal and organizational communication.

### Core Course in Speech Communication

The department offers SPCH 1300, which is a part of the UALR core curriculum. The course helps fulfill the written and oral literacy requirement. Students who feel they already possess the competencies developed in SPCH 1300 may attempt to complete the course requirement by testing out.

For information about test dates, required fees, and test content, students should contact the Office of Testing Services and Student Life Research. A student who successfully tests out will receive three credit hours towards graduation and a grade of Credit (CR). SPCH 1300 is a prerequisite for all other courses in the department.

### Major in Speech Communication

This curriculum is designed to meet the needs of students with an interest in communicative behavior in business, education, industry, and other professions. Students are trained in interpersonal and public communication skills related to human relations and organizational communication.

The major requires 34 credit hours beyond Speech Communication 1300, including Speech Communication 2310, 2311, 3320, 4300, 4110; three courses chosen from 3316, 3322, 3323, 3340, 4321; four courses chosen from 3300, 3315, 3350, 4310, 4311, 4312, 4313, 4350.

Recommended minors for this curriculum are psychology, management, journalism, professional and technical writing, human services, and general business. Potential majors may secure an advisor by contacting the department. A grade of C or greater must be attained to fulfill a course requirement for the major.

Admission requirements include successful completion of at least 12 semester hours with a GPA of at least 2.00, RHET 1311, and SPCH 1300 with a minimum grade of C.

### Minor in Speech Communication

The minor in speech communication requires 18 hours beyond SPCH 1300, including SPCH 2310, 3320, and 12 upper-level hours in speech communication.

### Minor in Professional Communication

The minor in professional communication is designed to enhance communication skills necessary for success in a student’s chosen career. The minor requires 18 hours beyond SPCH 1300, including SPCH 2310, 3320, nine hours from 3316, 3322, 3323, 3330, 3340, and 4311 and 3 additional upper-level hours in speech communication.
BACHELOR OF ARTS IN SPEECH COMMUNICATIONS

Core Requirements (44 hours)

Second Language Proficiency

All of the Following (16 Hours)

- SPCH 2310 Human Communication Concepts
- SPCH 3320 Advanced Public Speaking
- SPCH 3322 Small Group Communication
- SPCH 4300 Senior Seminar
- SPCH 4310 Investigations into Communication Research
- SPCH 4110 Independent Study

Two Courses from the Following (6 Hours)

- SPCH 3300 Interpersonal Communication
- SPCH 3316 Interviewing
- SPCH 3323 Conflict Management
- SPCH 4321 Professional Communication

Three Courses from the Following (9 Hours)

- SPCH 3315 Gender Communication
- SPCH 4311 Organizational Communication
- SPCH 4312 Intercultural Communication
- SPCH 4313 Seminar: Topics in Communication
- SPCH 4320 Public Address: Speakers and Audiences
- SPCH 4323 Family Communication

Any three additional hours in Speech Communication (3 Hours)

General Electives (19 Hours)

Upper-level Electives (12 Hours)

Graduate Program

The department offers a master’s degree in interpersonal and organizational communication. See the UALR Graduate Catalog for details.

Speech Communication Education

Students seeking secondary teacher licensure in speech communication should contact an advisor in the department. See “Secondary Teacher Licensure.”

Speech Communication

SPCH 1300 Speech Communication

This course helps students effectively deliver an oral presentation to an audience; listen to and critique objectively the oral presentations of others; effectively participate in one-to-one communication experiences using techniques of active listening, conflict resolution, and information gathering; organize, participate in, and lead small groups as they problem-solve; and recognize and use effective oral language as a tool of sound reasoning. Student performance is emphasized along with lecture, discussion, and self-instructional study center exercises. Students learn through writing, reading, discussing, listening, and participating in critical thinking and problem-solving activities. Three credit hours.

SPCH 2134 Listening

Prerequisite: SPCH 2310. An introduction to the knowledge, theory, and skills needed to improve listening. Extensive exercises and tests to promote the learning of productive listening techniques, note taking, and types of listening skills. One credit hour.

SPCH 2140 Applied Communication Ethics

Prerequisite: SPCH 2310. Analysis of ethical issues in communication at multiple levels (interpersonal, small group, organizational, and public speaking). The course offers situations in which students consider the implications of ethical decision making, respond to ethical alternatives and discuss the effects of various responses. One credit hour.

SPCH 2310 Human Communication Concepts

Prerequisite: SPCH 1300. This course provides an overview to the study of human communication. A number of contemporary approaches to human interaction in interpersonal, small group, organizational, and intercultural situations are reviewed. The focus is on learning the basic terminology and theoretical concepts associated with the general study of communication. Three credit hours.

SPCH 2311 Introduction to Communication Research

Prepares students to understand the research and application focus of a major in communication. Topics include asking good research questions, the role of case studies in communication research, and understanding basic research principles. The focus of this course is to enable students to apply theory in meaningful ways to better understand real-life situations. Three credit hours.

SPCH 3121 Parliamentary Procedure

Prerequisite: SPCH 1300. Principles of parliamentary procedure as used in most business and social organizations. Programmed cognitive learning and simulated practice in mock meetings. One credit hour.

SPCH 3300 Interpersonal Communication

Prerequisite: SPCH 1300. Enhances the student’s ability to understand and participate in effective interpersonal communication. Topics include verbal and nonverbal communication, relational management, self-concept, and relationship roles. Focus on using major interpersonal theories and concepts, as well as in-class activities to develop a heightened awareness of relationship issues, as well as interpersonal communication competence. Three credit hours.

SPCH 3315 Gender Communication

An examination of gender as it influences verbal and nonverbal interaction between men and women. Topics include the ways communication in families, schools, media, and society creates and perpetuates gender roles, and how socially-created gender differences in public and private settings affect success, satisfaction, and self-esteem. Focus on using major gender communication theories and concepts to develop a heightened awareness of gender issues that relate to human interaction. Three credit hours.

SPCH 3316 Interviewing

Prerequisite: SPCH 1300. This course develops the student’s ability to effectively prepare for and participate in a variety of interview situations. Topics include impression management, rapport building, interview organization, effective questions and answers, and effective listening. Types of interviews covered include employment, probing, survey, persuasive, selection, and answers, and effective listening. Types of interviews covered include employment, probing, survey, persuasive, selection, performance, counseling, and health care. The focus is on using in-class activities to develop effective interviewing skills. Three credit hours.

SPCH 3320 Advanced Public Speaking

Prerequisite: SPCH 1300. This course develops the student’s ability to effectively prepare and deliver a speech. Topics include audience analysis, critical thinking and listening, the use of supporting materials and visual aids, and the development of presentation skills. The focus is on using in-class activities to develop effective research, organization, and presentation skills. Three credit hours.
SPCH 3322 Small Group Communication
Prerequisite: SPCH 1300. This course develops the student's ability to effectively communicate in small groups or teams. Topics include group formation, group leadership, effective listening in groups, techniques of problem solving, group norms, effective group participation, and management of group conflict. The focus is on using in-class and group activities to develop effective small-group interaction skills and group presentation skills. Three credit hours.

SPCH 3323 Conflict Management
Prerequisite: SPCH 1300. Development of the student's ability to effectively manage conflict in organizations, groups, and personal relationships. Topics include theories, styles, patterns, and systems of conflict as well as conflict management techniques of negotiation, and mediation. The focus is on using in-class activities to better understand the factor and dynamics of conflict resolution and develop effective conflict management skills. Three credit hours.

SPCH 3330 Professional Communication
Prerequisite: SPCH 1300. Development of the student's ability to effectively interact in professional business situations. Topics include listening, coaching/mentoring, dealing with difficult people, delegation, formal and informal communication, civility, and customer service. Focus on using in-class activities to develop professional communication skills. Three credit hours.

SPCH 3340 Communication Ethics for the Professional
Prerequisite: SPCH 1300. This course explores the common ethical questions encountered in business and professional settings. Topics include whistle blowing, employee rights, public relations, ethical codes, sexual harassment, leadership ethics, and organizational legitimacy. The focus is on illustrating the importance of ethics to the professional through practical applications of communication-based principles. Three credit hours.

SPCH 3350 Nonverbal Communication
Prerequisite: SPCH 1300. Examination of codes of nonverbal communication within personal, interpersonal, and professional contexts. Topics include the functional perspective of nonverbal communication; factor of appearance, body language, space, touch, paralanguage, artifacts, and time; interpersonal attractiveness; credibility; dominance; and impression management. Focus on using major nonverbal communication theories and concepts to develop a heightened awareness of the role of non-verbals in human interaction. Three credit hours.

SPCH 4110 Senior Presentation
Prerequisite: SPCH 4300. Development and presentation of a major work done in the senior seminar. Part of the speech communication major capstone sequence. One credit hour.

SPCH 4100, 4201 Independent Study
Prerequisite: SPCH 1300. These courses provide students with an opportunity to read and conduct research in a selected area of speech communication studies. Projects and papers must be approved by the instructor prior to registration. One or two credit hours.

SPCH 4300 Senior Seminar
Prerequisites: SPCH 2310, Speech 2310, and 15 hours in speech communication. Application of human communication theory to real situations. Topics include researching the communication literature, organizing arguments, analyzing communication events, and deriving practical implications from communication theory. Focus on applying a specific communication theory to a specific real-life situation. Part of the speech communication major capstone sequence. Three credit hours.

SPCH 4310 Investigations into Communication Research
Prerequisite: SPCH 1300 and 4300. Examination of the applied role of communication research methods in a variety of contemporary organizations. Topics include the research process, both quantitative and qualitative research approaches, as well as questions of research ethics. Focus on identifying the practical applications of research methods for organizational members. Dual-listed in the UALR Graduate Catalog as SPCH 5310. Three credit hours.

SPCH 4311 Organizational Communication
Prerequisite: SPCH 2310. Examination of organizational communication theories, communicative implications of historical and modern management theories, as well as special interest topics. Major topics include cultural and critical approaches to organizational communication, classical management and human relations theory, and communication effectiveness. Special topics may include teams in organizations, diversity, organizational politics, leadership and change. Focus on applying organizational communication theories and concepts to understand others better and to control one's own communication in organizations. Dual-listed in the UALR Graduate Catalog as SPCH 5311. Three credit hours.

SPCH 4312 Intercultural Communication
Prerequisites: SPCH 1300. Examination of culture as it influences human interaction in a wide range of contexts, including work, medical, interpersonal and political. Topics include culture shock, language, nonverbal, intercultural conflict, and culture and the media. Focus on using major intercultural communication theories and concepts, as well as in class activities to develop a heightened awareness of intercultural issues, as well as intercultural communication competence. Dual-listed in the UALR Graduate Catalog as SPCH 5312. Three credit hours.

SPCH 4313 Seminar: Topics in Communication
Prerequisites: SPCH 2310. Investigation of timely communication theories, skills, and practices. Topics selected from a variety of theoretical or practical perspectives. Focus is on an in-depth treatment of a content area not typically represented in other courses in the major. May be repeated for credit. Dual-listed in the UALR Graduate Catalog as SPCH 5313. Three credit hours.

SPCH 4314 Internship
Prerequisites: SPCH 1300. An opportunity to apply communication concepts and skills in a professional setting within the department. Interns gain experience working in the Speech Communication Interactive Learning Center, assisting in its operation primarily with students in the basic course. Focus is on experiencing and analyzing communication in real-world situations. Contact the department's basic course coordinator before enrolling in this course. Three credit hours.

SPCH 4315 Cooperative Education in Speech Communication
Prerequisite: SPCH 1300. An opportunity to apply communication concepts and skills in a professional setting outside the department. Focus is on experiencing and analyzing communication in real-world situations. Contact the department's coordinator of cooperative education before enrolling in this course. Three credit hours.

SPCH 4320 Public Address: Speakers and Audiences
Prerequisite: SPCH 2310. History and criticism of United States speakers and speeches that reflect dominant social and political ideas in United States history. Three credit hours.
SPCH 4321 General Semantics
Prerequisite: SPCH 2310. Comprehensive examination of the way human beings use word symbols to define themselves, verbally map their environment, describe the past, and project the future. Study of the distortions that can occur between symbolic representation and actual events, the impact of this disparity on human behavior, and the means of adjustment. Survey of the origins of spoken symbols and the process of developing symbol systems. Three credit hours.

SPCH 4323 Family Communication
Prerequisite: SPCH 1300. Examination of long-term relationships within a family context from a speech communication perspective, primarily examining behaviors that occur in a functional family. Topics include family rules and roles, conflict styles, power, and decision-making. Focus is on using major family communication theories and concepts to help the student analyze the communication system of a family and identify communication patterns, problems, and dilemmas in the families. Three credit hours.

SPCH 4324 Organizational Communication II
Prerequisite: SPCH 1300. Special topics in organizational communication including but not limited to organizational identification, risk and issue management, organizational change, or critical approaches to organizational communication. Focus on giving students an in-depth understanding of a specialized aspect of organizational communication. Dual-listed in the UALR Graduate Catalog as SPCH 5324. Three credit hours.

SPCH 4550 Effective Crisis Communication
This course investigates and analyzes instances of effective and ineffective crisis communication. Students will examine the internal organizational processes and the larger environment within which various organizations exist focusing on issues such as stakeholders, legal environments, and the larger social and cultural contexts. Dual-listed in the UALR Graduate Catalog as SPCH 5550. Five credit hours.
The College of Science and Mathematics (CSAM) provides instruction and research in many fields of science, mathematics, health science and nursing. Its objectives include enhancing educational opportunities for undergraduate and graduate students, improving science and mathematics education in Arkansas, expanding research opportunities for faculty and students, and strengthening its many partnerships with schools, corporations and government to improve the economic strength of our region.

CSAM provides its majors with appropriate course content designed to develop the attitudes and skills necessary for careers in many fields of science, mathematics, health science, and nursing needed to meet the highly technical demands of today’s society. CSAM graduate programs provide advanced training and expertise for anyone who expects to pursue a career in one of these fields. In addition, many course offerings within CSAM are required to fulfill the general education core requirements and for other majors throughout the University.

**General Information**

The curriculum of each department is designed to attain these objectives. Introductory courses in astronomy, biology, chemistry, geology, health sciences, mathematics and statistics, and physics are designed to meet the needs of all college students. Advanced courses are available in each field of study, arranged in scope and sequence, that lead to increased competency and specialization in these fields. Graduates of CSAM programs are capable of immediately seeking employment or pursuing an advanced degree through graduate education.

An associate degree is offered in nursing. Baccalaureate degrees are offered with majors in biology, chemistry, environmental health sciences, geology, health professions, health sciences, mathematics, nursing and physics. Minors are offered in the aforementioned areas as well as in astronomy and statistics. Pre-professional curricula opportunities are also available within the college. Pre-professional curricula opportunities include but are not limited to dentistry, medicine, nursing, pharmacy, physical therapy physician assistant and veterinary medicine. In addition, opportunities for study in marine science are provided through UALR’s affiliation with the Gulf Coast Research Laboratory located in Ocean Springs, Mississippi.

Please see the *UALR Graduate Catalog* for graduate coursework leading to master’s degrees in biology, chemistry, health sciences, integrated science, mathematics, and applied mathematics, and for information about the doctoral programs available through applied science and bioinformatics.

Most CSAM departments offer honors track options for highly motivated and well-prepared students. Specific requirements are defined by each department. Please review the departmental descriptions on the following pages of this catalog and/or contact each respective department chairperson for details.

CSAM coordinates with the College of Health Related Professions (CHRP) of the University of Arkansas for Medical Sciences (UAMS) in providing the necessary pre-professional curricula for many of the CHRP programs. These programs are coordinated between both institutions and include all courses needed by students in the health-related professions. Many of the pre-requisite courses for CHRP programs are listed in this catalog. Prospective students are expected to read the latest CHRP catalog or visit the website of their intended program to obtain the latest information on pre-requisite requirements.

CSAM has several scholarships available in the various program areas. For more information contact the departmental offices or Karin Bara in the Office of Development.

Students applying to a degree program in the College of Science and Mathematics must meet the admissions requirements of the department offering the degree. Each department’s section in this catalog identifies its specific admissions criteria.

**Pre-professional Studies**

CSAM offers pre-professional curricula for students interested in professional areas requiring a background in science and/or technology as well as in the liberal arts. The pre-medical and pre-health advisors and the college’s Premedical Advisory Committee advise students preparing to apply for entrance into such programs. Applications must be submitted approximately one year before the student enters a professional school. Thus, students should obtain information and advice about their intended programs of study as early as possible.

Advisement in the other pre-professional areas is available through the Health Sciences department in Friborough Hall building (FH), room 506. Prospective students should be aware of the Arkansas Health Education Grant Program (ARHEG). The ARHEG provides assistance to students seeking professional training in dentistry, optometry, veterinary medicine, osteopathic medicine, podiatric medicine and chiropractic medicine to allow them to attend out-of-state institutions. Students are encouraged to visit with ARHEG to determine if they meet the eligibility requirements and inquire about the availability of funding for that particular year.
Pre-Medical and Pre-Dental

Students are required to meet with the Pre-Med Advisor (Dr. Greg Barnes, FH 404) early in their academic career. Students are also required to meet with Dr. Barnes within the first two weeks of school the fall semester in which they are applying to medical or dental school. The following science courses meet the entrance requirements of most medical or dental schools. Students should contact the medical or dental school of their choice for specific entrance requirements.

- BIOL 1401 Science of Biology
- BIOL 2403 Zoology
- BIOL 3300 Genetics
- CHEM 1402 General Chemistry I
- CHEM 1403 General Chemistry II
- CHEM 3350 General Organic Chemistry I
- CHEM 3150 Organic Chemistry Laboratory I
- CHEM 3351 General Organic Chemistry II
- CHEM 3151 Organic Chemistry Laboratory II
- PHYS 1321 Elementary Physics I
- PHYS 1121 Elementary Physics I Laboratory
- PHYS 1322 Elementary Physics II
- PHYS 1122 Elementary Physics II Laboratory

These are the minimum science courses required and will prepare the student for the Medical College Admissions Test (MCAT). Some medical or dental schools may require or recommend additional courses. The College of Medicine of the University of Arkansas for Medical Sciences requires the following courses for admission: genetics, two semesters each of biology, general chemistry, organic chemistry, mathematics (or through Calculus I), and physics; and English. UAMS does not allow for these courses to be taken on-line. Students considering entrance at other medical schools should verify that specific program’s entrance requirements.

Health Professions Degree

CSAM offers a bachelor of science degree in health professions to students upon completion of 94 credit hours in a pre-medical or pre-dental curriculum and the successful completion of one year (30 hours maximum) in an approved medical or dental school. The last 30 credit hours in the pre-medical or pre-dental curriculum must be completed at UALR.

The health professions curriculum includes the University’s core curriculum requirements and the following courses in biology, chemistry, and physics: BIOL 1401, 2403, and six hours of electives; CHEM 1402, 1403, 2310, 2311 or 4420, 3150, 3350, 3151, and 3351; and PHYS 1121, 1321, 1122, and 1322.

Students interested in the health professions degree should consult the Associate Dean, Dr. Thomas Lynch, ETAS 125.

Audiology and Speech Pathology

Please see the undergraduate and graduate curriculum for audiology and speech pathology in the College of Professional Studies.

Chiropractic

A candidate must have completed at least 90 credit hours leading to a baccalaureate degree, including laboratory courses in biology, chemistry, and physics. A grade point of 2.25 or greater is required, and no more than 20 hours may be acquired through CLEP or challenge examinations. Only non-science courses may be completed through credit by examination. The Council on Chiropractic Education, through its accrediting agency, requires the pre-professional curriculum to include six hours of English, eight hours of biology with a laboratory, eight hours of inorganic chemistry with a laboratory, eight hours of organic chemistry with a laboratory, eight hours of physics with a laboratory, three hours of general psychology, three hours of sociology, 24 total physical sciences hours, and 24 total hours in the humanities or social sciences. Additional course requirements vary with each chiropractic program. The student should obtain specific information from the school of his or her choice.

Cytotechnology

This program is offered through the College of Health Related Professions at the University of Arkansas for Medical Sciences. To be admitted, students must have completed a minimum of 84 semester credits, at least five of which must be upper-level (junior/senior) from an accredited college or university. The required courses include:

- English Composition (6 hours)
- College Algebra (3 hours)
- Biology or Zoology (20 hours)
- Fundamental Chemistry (8 hours)
- Fine Arts (3 hours)
- History of Civilization or World History (6 hours)
- Humanities (3 hours)
- U.S. History or American Government (3 hours)
- Social Sciences (6 hours)
- Speech Communication (3 hours)
- Electives (24 hours)

Dental Hygiene

Dental Hygiene offers both an Associate and a Bachelor’s degree. Students should visit the website www.uams.edu/chrp, for specific requirements of each degree program. Students must have completed at least 39 credit hours from an accredited college or university to be admitted to the dental hygiene program in the College of Health Related Professions at the University of Arkansas for Medical Sciences. The required courses include:

- Microbiology (4 hours)
- College Algebra or higher mathematics (3 hours)
- Computer Fundamentals/Applications (3 hours)
- Fine Arts (3 hours)
- General Psychology (3 hours)
- History of Civilization (6 hours)
- Humanities (3 hours)
- Introduction to Sociology (3 hours)
- Speech Communication (3 hours)
- English Composition (6 hours)
- U.S. History or American Government (3 hours)

Diagnostic Medical Sonography

This program is offered through the College of Health Related Professions at the University of Arkansas for Medical Sciences. To be admitted, students must have completed a minimum of 52 credit hours from an accredited college or university.

The required courses include:

- English Composition (6 hours)
- Human Anatomy and Physiology (8 hours)
- Introductory Physics (4 hours)
- Speech Communication (3 hours)
- College Algebra (3 hours)
- U.S. History or National Government (3 hours)
- History of Civilization (6 hours)
- Introduction to Sociology (3 hours)
- General Psychology (3 hours)
- Fine Arts (3 hours)
- Humanities (3 hours)
- Computer fundamentals/applications (3 hours)
- Electives (6 hours)

Emergency Medical Sciences

Emergency Medical Sciences offers an Associates degree and a Certificate in Emergency Medical Sciences. It also offers an intensive Six-Month Paramedic Program. Please contact the CHRP Department for specific details about the Paramedic Program.
Health Information Management

This program is offered through CHRP at UAMS. To be admitted, students must have graduated from high school. Graduating high school students may apply to the program. There are no prerequisites. Successful applicants should be computer literate and know how to use word processing and spreadsheets. While there are no prerequisite courses, students must complete 35 credit hours of general education courses plus 3 credit hours of computer fundamentals; the latter must be taken within seven years of admission into the program.

Medical Technology

The Medical Technology program is offered through CHRP at UAMS and accepts students with a minimum of 67 credit hours. The pre-medical technology course work must include:

- College Algebra or higher math (3 hours)
- General Chemistry (8 hours)
- General Biology (BIOL 1401, 2403) (8 hours)
- Microbiology (4 hours)
- Anatomy and Physiology (4 hours)
- English Composition (6 hours)
- Speech Communication (3 hours)
- Fine Arts (3 hours)
- History of Civilization (6 hours)
- U.S. History or American Government (3 hours)
- Social Science (6 hours)
- Humanities (3 hours)
- Electives (12 hours)

Department of Imaging and Radiation Sciences

Nuclear Medicine Imaging Sciences Program

This program is offered through CHRP at UAMS. To be admitted, students must have completed a minimum of 84 credit hours from an accredited college or university, 6 credit hours of which must be junior/senior level. The required pre-professional courses include:

- Human Anatomy and Physiology (8 hours)
- Elementary Physics I and II (8 hours)
- General Chemistry (8 hours)
- Biological Sciences or Microbiology (4 hours)
- Statistics (3 hours)
- College Algebra (3 hours)
- Speech Communication (3 hours)
- English Composition (6 hours)
- History of Civilization (6 hours)
- Humanities (3 hours)
- U.S. History or American Government (3 hours)
- Fine Arts (3 hours)
- Social Sciences (6 hours)
- Computer fundamentals / Applications (3 hours)
- Electives (19 hours)

Medical Dosimetry

This program is offered through the College of Health Related Professions (CHRP) at UAMS. Applicants who have or will have completed a bachelor’s degree in a biological sciences, physical science (physics, chemistry, or mathematics), biomedical engineering, or radiation sciences (as a registered radiation therapist) prior to fall registration will be considered for admission to seek a bachelor’s degree if they have successfully completed the course work listed below. The required pre-professional courses include:

- College Algebra (3 hours)
- Calculus I and II (6 hours)
- Additional math (3 hours)
- Chemistry with laboratory (4 hours)
- Biology with laboratory (4 hours)
- Anatomy and Physiology I & II (8 hours)
- Physics I and II (algebra or calculus based) (8 hours)
- Medical Terminology (3 hours)
- English Composition I and II (6 hours)
- American History or National Government (3 hours)
- World/Western Civilization I and II (6 hours)
- Humanities (3 hours)
- Sociology/Psychology (6 hours)
- Speech (2 hours)
- Computer Fundamentals/Applications (3 hours)
- Fine Arts (3 hours)
- Electives (22 hours/7 hours)

Optometry

Most schools and colleges of optometry require certain courses prior to admission. These courses include:

- General Biology and Zoology (8 hours)
- General Chemistry (8 hours)
- Organic Chemistry (8 hours)
- English (6 hours)
- Mathematics (including differential calculus) (6-9 hours)
- Microbiology (4 hours)
- Psychology (3 hours)
- Elementary Physics (8 hours)
Additional course requirements vary with each optometry program. The student should obtain the specific information from the school of his or her choice. Science courses taken at UALR should be those designated for pre-professional students and must include laboratory experience. Brief survey courses in the sciences will not prepare a student for an optometry school.

**Pre-Pharmacy**

This two-year, 69-hour pre-pharmacy curriculum meets the specific entrance requirements of the University of Arkansas College of Pharmacy located on the UAMS campus. Students planning to enter other schools of pharmacy are urged to obtain a copy of the entrance requirements from the school of their choice early in their freshman year and coordinate those requirements with courses taken at UALR. For advising purposes, the pre-pharmacy students should declare Chemistry BA or BS degree or Biology BS as major. The UALR pre-pharmacy curriculum assumes that the student is prepared to enroll in MATH 1302 and CHEM 1402. If the student is deficient in these areas, an additional semester or summer school may be necessary.

The UALR pre-pharmacy curriculum is organized by subject areas, semester hours, and courses. Some of the subject areas allow for choices among courses. In the freshman year the student should fulfill the mathematics requirement, at least six hours of the English/communications requirement, the general chemistry and biology requirements, the economics requirement, and one or two humanities electives. In the sophomore year, the student should satisfy the physics, organic chemistry, and critical thinking requirements, together with the remaining required communication course and humanities electives.

No course can be used to satisfy the requirements in more than one area. No more than eight semester hours of CLEP, AP credit, or credit by examination for core requirements that appear on the official transcript will be accepted to meet the pre-pharmacy requirements. For non-core requirements, no more than 12 semester hours of CLEP, AP credit, or credit by examination that appear on the official transcript will be accepted to meet the pre-pharmacy requirement will be accepted. Note that UAMS pharmacy does not accept online courses or laboratory courses. Courses should be taken in a face-to-face format. The humanities elective requirement cannot be met by developmental education courses or courses in the following areas: health, physical education, business, science, military science, education, computer courses, agriculture, studio courses in art, music, or theater. All chemistry and biology courses must be courses for majors in that field. Physics courses do not have to be calculus-based.

<table>
<thead>
<tr>
<th>Pharmacy Suggested Curriculum (69 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mathematics (3-5 hours)</strong></td>
</tr>
<tr>
<td>MATH 1451 Calculus I</td>
</tr>
<tr>
<td>or MATH 1311 Applied Calculus I</td>
</tr>
<tr>
<td><strong>English/Communication (9 hours)</strong></td>
</tr>
<tr>
<td>RHET 1311 Composition I</td>
</tr>
<tr>
<td>RHET 1312 Composition II</td>
</tr>
<tr>
<td>ENGL 2335 Introduction to Literature</td>
</tr>
<tr>
<td>or RHET 2312 Advanced Composition</td>
</tr>
<tr>
<td>or other, higher course</td>
</tr>
<tr>
<td>SPCH 1300 Speech Communication</td>
</tr>
<tr>
<td><strong>Chemistry (16 hours)</strong></td>
</tr>
<tr>
<td>CHEM 1402 General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1403 General Chemistry II</td>
</tr>
<tr>
<td>CHEM 3350 General Organic Chemistry I</td>
</tr>
<tr>
<td>and CHEM 3150 Organic Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM 3351 General Organic Chemistry II</td>
</tr>
<tr>
<td>and CHEM 3151 Organic Chemistry Laboratory II</td>
</tr>
<tr>
<td><strong>Biology (12 hours)</strong></td>
</tr>
<tr>
<td>BIOL 1401 Science of Biology</td>
</tr>
<tr>
<td>BIOL 2401 Microbiology</td>
</tr>
<tr>
<td>or BIOL 4406 Pathogenic Microbiology</td>
</tr>
<tr>
<td>BIOL 2403 Zoology</td>
</tr>
<tr>
<td><strong>Physics (4 hours)</strong></td>
</tr>
<tr>
<td>PHYS 1321 Elementary Physics I</td>
</tr>
<tr>
<td>and PHYS 1121 Elementary Physics Laboratory</td>
</tr>
<tr>
<td><strong>Economics (3 hours)</strong></td>
</tr>
<tr>
<td>ECON 2322 Principles of Microeconomics</td>
</tr>
<tr>
<td>or ECON 2323 Principles of Macroeconomics</td>
</tr>
<tr>
<td>or ECON 2301 Survey of Economics</td>
</tr>
<tr>
<td>or ACCT 1310 Introduction to Accounting and Taxation</td>
</tr>
<tr>
<td>or ACCT 2310 Principles of Accounting I</td>
</tr>
<tr>
<td><strong>Recommended Electives (9 hours)</strong></td>
</tr>
<tr>
<td>CHEM 2310 Analytical Chemistry I</td>
</tr>
<tr>
<td>MATH 1452 Calculus II</td>
</tr>
<tr>
<td>or MATH 1312 Applied Calculus II</td>
</tr>
<tr>
<td>STAT 2350 Introduction to Statistical Methods</td>
</tr>
<tr>
<td>PHYS 1322 Elementary Physics II</td>
</tr>
<tr>
<td>and PHYS 1122 Elementary Physics II Laboratory</td>
</tr>
<tr>
<td>PHIL 1330 Introduction to Critical Thinking</td>
</tr>
<tr>
<td>or PHIL 2350 Introduction to Logic</td>
</tr>
<tr>
<td>BIOL 3402 Mammalian Anatomy or BIOL 4402 Limnology</td>
</tr>
<tr>
<td>or BIOL 3300 Genetics and BIOL 3100 Genetics Laboratory</td>
</tr>
<tr>
<td>or BIOL 4417 Molecular Biology or BIOL 4401 Cell Biology</td>
</tr>
<tr>
<td>or CHEM 4420 Biochemistry</td>
</tr>
<tr>
<td><strong>Humanities Electives (to total 69 hours)</strong></td>
</tr>
</tbody>
</table>

**Physical Therapy**

There are physical therapy programs available at the University of Central Arkansas (UCA) and Arkansas State University (ASU); both programs are graduate level and require a baccalaureate degree for admission plus specific course requirements. UCA’s program is a doctoral program and ASU’s is a master’s program. Students interested in either program should request admissions materials directly from the appropriate institution. Students should also seek advisement while attending UALR from an advisor in the Department of Biology or the dean’s office in the College of Science and Mathematics.
Respiratory Care

This program is offered through CHRP at UAMS. Both an associate of science and a bachelor of science degree are available. The bachelor of science degree may be completed in either Little Rock or Texarkana. To be admitted to the bachelor of science program, students must have completed a minimum of 66 credit hours from an accredited college or university. The required pre-professional courses include:

- English Composition (6 hours)
- College Algebra (3 hours)
- Human Anatomy and Physiology (8 hours)
- Chemistry (4 hours)
- Physics (4 hours)
- Microbiology (4 hours)
- Speech Communication (3 hours)
- U.S. History or American Government (3 hours)
- Computer Fundamentals/Applications (3 hours)
- General Psychology (3 hours)
- Introduction to Sociology (3 hours)
- History of Civilization (6 hours)
- Humanities (3 hours)
- Fine Arts (3 hours)
- Electives (6 hours)

Surgical Technology

This program is offered through CHRP at UAMS Associate of Science Degree.

The following 34-35 semester credits are required from a regionally accredited college or university and must fulfill all College of Health Related Professions requirements regarding acceptance of transfer credit:

- Human Anatomy and Physiology (8 hours)
- Microbiology (4 hours)
- Computer Fundamentals (3 hours)
- College Algebra or higher math (3 hours)
- English Composition (6 hours)
- Speech Communication (3 hours)
- U.S. History or American Government (3 hours)
- Introduction to Sociology (3 hours)
- General Psychology (3 hours)
- Electives (5 hours)

For specific details on the time requirement to complete courses for the associate degree, contact the chairperson of the Department of Surgical Technology at UAMS.

Veterinary Medicine

Admission requirements to colleges of veterinary medicine are similar to those listed for medicine. However, admission requirements do vary. Students interested veterinary programs should contact the college of their choice and identify specific requirements early in their undergraduate studies.

UALRTeach

This innovative teacher preparation program offers students seeking math or science degrees the opportunity to also earn a teaching license. Students receive early field experience and learn from mentor teachers while still pursuing their core degree. UALRTeach allows students to explore teaching as a career at no cost. Both of the one-credit courses below are available to UALR students who are thinking of majoring in science or math.

UALR Teach all starts with in the fall, SCED/IGSC 1101 Inquiry Approaches to Teaching (Step 1). The class focuses on hands-on and inquiry-based lessons. SCED/IGSC 1102 Inquiry-Based Lesson Design (Step 2) is offered in the spring. Students will continue developing lesson-planning skills learned in Step 1 but also become familiar with exemplary middle school science curricula.

SCED/IGSC 1101 Inquiry Approaches to Teaching (Step 1)

An introduction to the theory and practice necessary to design and deliver quality inquiry-based science and mathematics instruction that provides the scaffold for the early field experience. In this one hour credit course, the UALR Teach instructor or master teacher and the elementary school mentor teacher emphasize both inquiry and classroom management techniques. Step 1 invites students to explore teaching as a career. With the guidance of the instructor, in Step 1, students teach science or math lessons in upper elementary classrooms to obtain firsthand experience with planning and implementing inquiry-based curriculum. Master teachers teach Step 1, so students have direct access to accomplished teachers holding certificates who love teaching and who believe that teaching is a rewarding career choice. Local public school elementary classrooms provide the future teachers with a first taste of teaching in a supportive, diverse environment. Students shall be required to submit to a criminal background check.

SCED/IGSC 1102 Inquiry-Based Lesson Design (Step 2)

Prerequisite: SCED/IGSC 1101. This course (Step 2) continues the exploration of teaching careers in a middle school environment that began in SCED/IGSC 1101 (Step 1). In this one hour credit course, students observe a lesson taught by a middle school mentor teacher, and then plan and teach three inquiry-based middle school lessons with a partner. Students build on and practice lesson design skills developed in the Step 1 course while also becoming familiar with science or mathematics curricula for the middle school setting. Students demonstrate their own content knowledge in developing the lesson plans. As a result of their classroom experiences, students reflect on the observation and their teaching. At the end of the Step 2 experience, students are generally ready to make a decision about whether they want to pursue a pathway to teacher certification.

Course in Integrated Science

IGSC 4401 Integrated Science Methods

Prerequisite: 16 credit hours of science courses. Lecture, laboratory, and field methods stress the learning of science as active, integrated, constructive processes involving experimentation, investigation, communication, reasoning, and problem solving as applied to life, earth, and physical systems. Three hours lecture and two hours laboratory sessions are held each week.

Departments/Programs

College of Science and Mathematics
- Bachelor of Science in Health Professions
- Bachelor of Science in Biology
- Bachelor of Science in Environmental Health
- Bachelor of Science in Chemistry
- Bachelor of Science in Geology
- Bachelor of Science in Health, Human Performance & Sport Management
- Bachelor of Arts in Mathematics
- Bachelor of Science in Mathematics
- Associate of Science in Nursing
- Bachelor of Science in Nursing
- Bachelor of Arts in Physics
- Bachelor of Science in Physics
The Department of Applied Science is an interdisciplinary, graduate only department which supports applied research in a broad set of areas, including the following:

- Combustion
- Nanotechnology
- Plant Genetics
- Biomedical Engineering
- Biotechnology
- Environmental Research
- Geophysics
- Optics and Solar Energy
- Materials and Powder Science
- Applied Computing
- Smart Materials and Structures
- Microelectromechanical Systems (Mems)
- Robotics and Mechatronics
- Signal Processing

The department offers two degrees: the doctor of philosophy and the master of science. Each degree has several emphases, which are explained under the separate programs. Faculty housed in several other departments in both the College of Science and Mathematics (CSAM) and the Donaghey College of Engineering and Information Technology (DCEIT) participate in the various emphasis tracks.

Courses in Applied Science (ASCI)

**ASCI 4310 Introduction to Signal Processing**
Prerequisite: MATH 3322 or equivalent. Introduction to the fundamental concepts and mathematics in signal processing. Use of the fundamental transform techniques (Laplace transform, discrete Fourier transform, z-transform). Discrete time representation of signals, linear time invariant systems. Correlation, coherence, power spectral density, and time delays. Bode plots, poles and zeros, state space. Standard system models (ARMA, ARMAX). FIR and IIR filters. Dual-listed in the UALR Graduate Catalog as ASCI 5310. Three hours lecture. Three credit hours.

**ASCI 4315 Advanced Dynamics**
Prerequisites: MATH 2453, PHYS 3311. Kinematics of translating and rotating vectors. Dynamics of systems of particles and rigid bodies. Angular momentum. Newtonian mechanics. Lagrangian mechanics. Examples drawn from the fields of robotics, vehicle motion, planetary motion. Dual-listed in the UALR Graduate Catalog as ASCI 5315. Three credit hours.

**ASCI 4320 Introductory Continuum Mechanics**
Prerequisites: MATH 2453, MATH 3322, and PHYS 3300 or equivalents. This introductory course on Continuum Mechanics will take a unified approach to train the student in the modeling of deformation in solids, fluid flow and electric fields. Using a first principles approach, the fundamental conservation laws of mass, charge, momentum and energy will be covered. Applications to deformation in solids, heat transfer, fluid flow and electric fields will be addressed. Dual-listed in the UALR Graduate Catalog as ASCI 5320. Three credit hours.

**ASCI 4325 Measurement Techniques**
Prerequisite: SYEN 2315 or equivalent. Principles of operation and implementation of transducers used in electronic measurement systems. Sensors used for the measurement of strain, capacitance, pressure, flow, force, velocity, temperature, humidity, vibration, sound, and acceleration are discussed. Interfacing transducers with a digital system will be emphasized. Effects of quantization, scaling, sampling time, and bandwidth will be examined. Two hours lecture and three hours laboratory per week. Dual-listed in the UALR Graduate Catalog as ASCI 5325. Three credit hours.

**ASCI 4330 Acoustics I**
Prerequisite: MATH 2453 or equivalent. Development of the equations for acoustics and vibrations. Transducers for measurement of sound and acceleration. Design of sonic actuators using network analysis. Analog and digital processing of signals, including spectral analysis, adaptive signal processing, and cepstral analysis. Applications to noise analysis and control, and machinery diagnosis through sound and vibrations measurements. Dual-listed in the UALR Graduate Catalog as ASCI 5330. Three credit hours.

**ASCI 4335 Mechatronics I**
Prerequisites: MATH 2453 or equivalent, PHYS 3311 or equivalent, or consent of instructor. This course covers basic mechanical design elements, including gears, fasteners, bearings, sprockets and chains, timing pulleys, brakes and clutches. Methods of attaching power and timing elements to shafts, including standard keys, Woodruff keys, splines, pins, and press-fits, are covered. Use of electric motors and pneumatics in mechanical systems is covered. Interconnection of sensors, including potentiometers, limit switches, and yaw rate sensors is covered. Theories of failure will be introduced, and basic stress/strain calculations will be done. Design theories and project management will be introduced. Dual-listed in the UALR Graduate Catalog as ASCI 5335. Three hours lecture. Three credit hours.
ASCI 4340 Mechatronics II  
Prerequisite: ASCI 4335 or equivalent. The combination of classical mechanical design, electronic analysis and design, control engineering, and computer science in the design of complex electric/mechanical/controlled systems. Commonly used sensors (encoders, potentionmeters, accelerometers) and actuators (stepping motors, DC motors) are studied. Interfacing sensors and actuators to a microcomputer, discrete controller design, and real-time programming for control using the C programming language. There is a significant, out-of-class project exercise associated with this course. Dual-listed in the UALR Graduate Catalog as ASCI 5340. Three hours lecture. Three credit hours.

ASCI 4345 Microcontrollers  
Prerequisite: SYEN 2315 or equivalent or consent of the instructor. Experimental, project-oriented; architecture, programming, interfacing, design of systems; based on single chip microcontroller. Offered on demand. Dual-listed in the UALR Graduate Catalog as ASCI 5345. Three hours lecture. Three credit hours.

ASCI 4355 Elastic Wave Theory  

ASCI 4360 Potential Theory  
Solution to Laplace equation using different boundary and initial conditions. One-, two-, and three-dimensional equations will be analyzed. Various coordinate systems (rectangular, cylindrical, and spherical) will be used in the solution of Laplace equation. Bessel function and orthogonality of Bessel function. Legendre function, Associate Legendre function, and orthogonality of Legendre function. Dual-listed in the UALR Graduate Catalog as ASCI 5360. Three credit hours.
Biology is a diverse discipline, the study of which allows entry into fields such as biotechnology, cell biology, conservation, ecology, physiology, environmental sciences, and the many aspects of the health-related sciences. The biology department includes faculty, course work, and programs in the traditional area of biology, Ecology and Organismal, molecular biotechnology, secondary education, and environmental health science. The biology department offers two degree programs: BS in biology and BS in environmental health sciences.

Students in both degree programs benefit from extensive laboratory experience that provides hands-on use of modern laboratory and field equipment. Through an affiliation with the Gulf Coast Research Laboratory at Ocean Springs, Mississippi, the department offers a variety of courses in marine biology. Furthermore, abundant opportunities allow specialized learning through undergraduate research, internships, cooperative education, and practicums. Student organizations for both degree programs provide opportunities for recreational, service, and career-oriented activities in which students and faculty interact informally.

**General Information**

Within the biology curriculum, the department offers courses that serve several objectives: to provide students with an understanding of basic biological principles and their importance in society; to provide a pre-professional background for students preparing to enter medicine, dentistry, veterinary medicine, and other professional fields; to provide a strong academic background for students entering careers immediately after the completion of their undergraduate degree; and to provide the breadth and depth of background needed to succeed in a graduate program.

A student pursuing the BS in biology may select from four concentrations: general biology, ecology and organismal biology, molecular biotechnology, and secondary education. A minor in biology is also offered.

**Admission Requirements**

Students who select biology as their major must have completed at least 15 credit hours at UALR, have a cumulative grade point average of 2.00 or greater on all course work at UALR, and have taken BIOL 1400 or BIOL 1401 (or equivalent) with a grade of C or greater.

Students who entered UALR conditionally by contract must complete the contract before being eligible for admission to the biology program.

Decisions regarding course equivalency and situations in which students have tested out of courses or transferred credit from other programs will be made by the department chairperson. Transfer students with 30 hours or more in transfer credit may be accepted into the biology degree program with fewer than 15 hours at UALR with the approval of the department chairperson.

**Honors Program in Biology**

The department offers an honors program to provide qualified students the opportunity to pursue advanced study and receive appropriate recognition. Interested students should apply to the department chairperson for admission.

Participants in the honors program are selected by the department faculty on the basis of these criteria:

1. junior standing,
2. minimum cumulative GPA of at least 3.25, and
3. acceptance by a faculty member for participation in a research project.

To complete the honors program a student must:

1. maintain the 3.25 GPA,
2. enroll in undergraduate research courses for a minimum of two semesters,
3. complete a minimum of three credit hours and a maximum of six hours of undergraduate research, and
4. present the results of the undergraduate research project at an honors seminar as well as submit a written report approved by the faculty supervisor to the department faculty.
Gulf Coast Research Laboratory

The University of Arkansas at Little Rock is affiliated with the Gulf Coast Research Laboratory at Ocean Springs, Mississippi. Through this arrangement students receive UALR credit for courses taken at the research laboratory during the 12-week summer teaching session, which usually begins the first full week in June each year. The summer session consists of two terms, although the length of some classes varies. Students register and pay tuition on the UALR campus and have their credit transferred to this campus for inclusion in their academic records.

Students who want to take courses in this program must apply by May 1 for summer enrollment and have prior approval of their department chairperson or the on-campus coordinator. For more information or application forms, contact the chairperson, Department of Biology.

Major in Biology – General Biology Concentration

Students selecting this concentration must complete 40 credit hours in biology and satisfy the following requirements.

**Biology Core**

- BIOL 1400 Evolutionary and Environmental Biology or BIOL 1401 Science of Biology
- BIOL 2401 Microbiology
- BIOL 2402 Botany
- BIOL 2403 Zoology
- BIOL 3300 Genetics
- BIOL 3303 Principles of Ecology
- BIOL 4190 Biology Seminar

Students must achieve a C or greater in each of these courses to complete the core requirements.

**Biology electives** (17 hours), which must include at least three courses with laboratories either as part of the course or as a separately numbered laboratory course. Students may choose these electives from the remaining biology course offerings on the basis of individual preference or need. Students choosing to specialize further may select an emphasis in botany, cell biology and physiology, ecology, or zoology.

**Additional requirements:** Students must complete at least eight hours of freshman chemistry, four hours of organic chemistry, six hours of physics (1321 and 1322 or equivalent) and three hours of computer science or statistics.

Ecology and Organismal Biology Concentration

This concentration is designed to prepare students interested in ecology, conservation, and organismal biology for entry into graduate program, employment in governmental agencies, non-profit organizations, or positions where an intergrating organismal and ecological background is required. Students completing this program have a broad background but also have enough upper-level courses to build depth in knowledge and skills. The program provides sufficient flexibility that students can tailor their programs to specific needs.

This program of courses is a major-minor combination; no separate minor is required.

**Biological Sciences (52 hours)**

The following must be included:

**Biology Core (23 hours as outlined previously)**

**Ecology and Organismal Concentration requirements (17 hours from the following)**

- BIOL 3100 Genetics Lab
- BIOL 3103 Ecology Lab
- BIOL 3405 Invertebrate Zoology or BIOL 3409 Vertebrate Zoology
- BIOL 4310 Evolution
- BIOL 4409 Plant Taxonomy or BIOL 4412 Plant Ecology
- BIOL 4403 Comparative Physiology or BIOL 4419 Plant Physiology

**Ecology and Organismal Concentration electives (12 hours from the following)**

- BIOL 3405, 3409, 3407, 3391, 3199-3499, 4312, 4314, 4315, 4402, 4404, 4405, 4407, 4408, 4409, 4410, 4411, 4412, 4421, 4424, 4305, 4419, 4401, 4415, 4417, 4391, 4199-4399, 4100-4300, 4189-4389, ENHS 3310, ERSC 4422, and Gulf Coast Research Laboratory courses

**Physical Sciences and Mathematics (27 hours)**

- CHEM 1400 & 1401 Fundamental Chemistry I & II or CHEM 1402 & 1403 General Chemistry I & II
- CHEM 2450 Organic Survey or CHEM 3150/3350 General Organic Chemistry I with lab
- STAT 2350 Introduction to Statistical Methods or MATH 1311/1111 Applied Calculus I with lab or higher
- 12 additional upper-level credits in mathematics, statistics, or science courses other than biology (i.e. Earth Science, Physics, or Chemistry).

Students must achieve a “C” or greater in each core course to complete the core requirements. No more than six hours of special topics and 6 hours of undergraduate research, independent study, or cooperative education may be applied toward the degree. Students planning to enter graduate programs should include six hours of Physics and two semesters of Organic Chemistry in their program.

**Molecular Biotechnology Concentration**

This concentration is a joint effort between the biology department at the UALR and the medical technology department of the UAMS. The curriculum is designed for students who want to pursue a research career in molecular biotechnology at the bachelor’s level (this program is not intended as a premedical or pre-professional curriculum). This concentration will prepare students for technical occupations in basic and applied molecular biotechnology research and positions with federal and state governmental agencies and private or commercial enterprises that conduct either basic or applied research in biotechnology.
The concentration is divided into two levels: a four-semester Pre-Biotechnology Curriculum that leads to admission to the Molecular Biotechnology Research Program (MBRP) which is a joint curriculum between UALR and UAMS. Completion of the Pre-Biotechnology Curriculum and candidacy to the MBRP requires a minimum of 60 hours including BIOL 2401, 2402, 2403, and 3300; eight hours of general chemistry; four hours of organic chemistry; and a minimum GPA of 2.60. Students transferring to UALR who wish to apply to the MBRP may substitute transferring courses for these requirements with the approval of the Molecular Biotechnology Research Committee. Admission to the MBRP will be competitive, based on the student’s cumulative GPA, an interview with the Molecular Biotechnology Research Committee, and two faculty recommendations. Each fall, a maximum of 20 students meeting these requirements will be admitted to the program.

This program of courses is a major-minor combination; no separate minor field is required. Requirements for this concentration are as follows in the column to the right.

**Biological Sciences (56 hours)**

**Biology Core (23 hours as outlined above)**

**Biotechnology Core (8 hours)**
- BIOL 4417 Molecular Biology
- BIOL 4418 Biotechnology

**Upper-level Biology Electives (12 hours)**
A recommended course list is available from the Department of Biology

**Biotechnology Electives (13 hours)**
- BIOM 3210 Laboratory Principles and Techniques
- BIOM 3211 Introduction to Research
- BIOM 4305 Cell Culture Principles and Techniques
- BIOM 4106 Technology Transfer
- BIOM 4507 Biotechnology Laboratory Internship

A Recommended equivalent course list is available from the biology department

**Physical Sciences, Mathematics, and Computation (24 hours)**

**Chemistry (12 hours)**
- CHEM 1400 Fundamental Chemistry I
  - or CHEM 1402 General Chemistry I
- CHEM 1401 Fundamental Chemistry II
  - or CHEM 1403 General Chemistry II
- CHEM 2450 Organic Chemistry-Short Course

**Physics (6 hours)**
- PHYS 1321 Elementary Physics I
- PHYS 1322 Elementary Physics II

**Mathematics (3 hours)**
- MATH 1302 College Algebra

**Computer Science (3 hours)**
- CPSC 1370 Computer Literacy
  - or equivalent course

Emphasis areas generally have fewer course options than standard majors so it is strongly suggested that students interested in this program declare a biology major and seek counseling in the Department of Biology as early as possible. The following model curriculum depicts a selection and sequence of courses that is strongly recommended.

**Secondary Teacher Licensure**

This concentration is designed to prepare students for teacher licensure in secondary education. Biology is the major emphasis and earth sciences the secondary emphasis (as prescribed by Arkansas law). A minor in secondary education is required. For more information, please see “Secondary Education Licensure” and contact the Department of Biology for academic advising.

**Minor in Biology**

A minor in biology requires 20 hours of credit in biology courses to include BIOL 1400 or 1401, a minimum of eight hours from sophomore level courses and eight additional hours, at least three of which must be upper level.

**Courses in Biology (BIOL)**

**BIOL 1102 Introductory Biology Laboratory**
A laboratory course in introductory biology covering the general concepts of microscope use, cell organization, physical and chemical bases of life, energy processing, cell reproduction, plant tissue structures, animal structures, organismic reproduction and development, genetics, and evolution. Offered only to students who have transfer credit for three credit hours of introductory biology lecture or the equivalent. Two hours laboratory per week. One credit hour.

**BIOL 1111 Introduction to Human Anatomy and Physiology I Laboratory**
Prerequisite: Only for students that have taken A&P I lecture or equivalent elsewhere or completed an online A&P I lecture equivalent. A laboratory course designed to be taught inside the current BIOL 1411 course and offered only to students that have 3 hours of Biology Department approved transfer credit for A&P I lecture or equivalent. After an introduction, the following topics will be discussed: basic chemistry, cell biology, histology, integumentary system, skeletal system, nervous system, and sensory system. This course cannot be used for credit toward a biology major or minor. Two hours laboratory per week. One credit hour.

**BIOL 1112 Introduction to Human Anatomy and Physiology II Laboratory**
Prerequisite: Only for students that have taken A&P II lecture or equivalent elsewhere or completed an online A&P II lecture equivalent. A laboratory course designed to be taught inside the current BIOL 1412 course and offered only to students that have 3 hours of Biology Department approved transfer credit for A&P II lecture or equivalent. After an introduction, the following topics will be discussed: muscular, digestive, respiratory, circulatory, lymphatic, urinary, reproductive, and endocrine organ systems. This course cannot be used for credit toward a biology major or minor. Two hours laboratory per week. One credit hour.

**BIOL 1305 Science Skills**
Prerequisite: Permission of the instructor. This course will help biology, chemistry, and earth science students reach their educational objectives. Interactive instructional methods promote the development of skills that lead to success in college and a successful career in science. Students 1) identify and use appropriate campus resources, 2) master common computer programs, 3) learn graphing and statistical methods, 4) develop better strategies to manage money, time, and stress wisely, and 5) explore the research conducted by UALR science faculty. Grading is based on projects, attendance, and participation. This course cannot be used for credit toward a biology, chemistry, or earth science major or minor. Three credit hours.
BIOL 1400 Evolutionary and Environmental Biology
Evolutionary, ecological, and environmental interrelationships among organisms. Basic biological principles and modern technology form the basis for inquiry and debate. The impact of society upon global biodiversity is examined from competing viewpoints. The role of science in shaping society and the influence of society upon science are evaluated. Students learn through reading, writing, computer simulations, videos, field exercises, and through participation in critical thinking and problem-solving activities. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 1401 Science of Biology
The process of science, including observation, evaluation, and predictions, will be applied to the understanding of biological principles. Illustration of the methods of science in the study of major biological concepts, including the cell theory, energy transformation, inheritance, and the theory of evolution. Selected biological systems will be surveyed to compare life forms and to examine related human issues. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 1411 Introduction to Human Anatomy and Physiology I
The first semester of a two-semester course emphasizing the anatomy and physiology of the human organism. After an introduction, the following topics will be discussed: basic chemistry, cell biology, histology, integumentary system, skeletal system, nervous system, and sensory system. This course cannot be used for credit toward a biology major or minor. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 1412 Introduction to Human Anatomy and Physiology II
Prerequisite: Biology 1411 or consent of instructor. The second semester of a two-semester course emphasizing the anatomy and physiology of the human organism. The muscular, digestive, respiratory, circulatory, lymphatic, urinary, reproductive, and endocrine organ systems will be covered during this term. This course cannot be used for credit toward a biology major or minor. Three hours lecture, two hours laboratory. Four credit hours.

BIOL 1413 Human Biology
A study of the structure and function of the human body, including the basic anatomy and physiology of the various body systems. Special attention will be given to methods of promoting and ensuring the well-being of the human organism. Designed for general students who want practical information about their bodies. This course is not intended for students majoring in nursing nor can it be used for credit toward a biology major or minor. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 2301 Environment and Man
A study of the relationship between humans and the natural environment. Characteristic animal and plant life in broad areas of nature and the influence individuals exert on these organisms; population and environmental problems humans have created, with the possible implications for the future and corrections which must be faced. Three hours lecture. Credit not applicable toward a biology major. Three credit hours.

BIOL 2400 Human Microbiology
A study of microbiological principles and those microorganisms relating to humans and their environment. This course is designed for associate degree health related programs and is not recommended to meet the requirements for a baccalaureate degree in health related professions. This course can not be used for credit toward a biology major or minor. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 2401 Microbiology
Prerequisites: BIOL 1400 or 1401, or 1411 and 1412, CHEM 1400 or 1402, or their equivalents. The morphology, physiology, and classification of microorganisms; the relationship of microorganisms to biotechnology, medicine, and nursing. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 2402 Botany
Prerequisite: BIOL 1400 or 1401 or equivalent. The structure and function of plants at the molecular, cellular, and organismal levels; survey of major plant groups. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 2403 Zoology
Prerequisite: BIOL 1400 or 1401 or equivalent. A survey of the animal kingdom from microscopic forms to mammals. Acquaints the student with the nature of animals. A study of general principles including taxonomy, organ systems, similarities of structure, function, and behavior of animals. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 3100 Genetics Laboratory
Prerequisite or corequisite: BIOL 3300. Selected experiments in genetics to emphasize techniques, analysis, and interpretation of the principles of inheritance in plants and animals. Two hours laboratory per week. One credit hour.

BIOL 3103 Principles of Ecology Lab
Prerequisite or corequisite: BIOL 3303. Basic methods and materials of ecological research. Two hours laboratory. One credit hour.

BIOL 3300 Genetics
Prerequisites: 12 hours of biology to include BIOL 1400 or 1401 or equivalent, four hours of chemistry; microbiology is recommended. Basic principles and theories of inheritance with applications to plant, animal, and human heredity. Emphasis on roles of DNA and RNA and the genetics of microorganisms. Three hours lecture per week. Three credit hours.

BIOL 3303 Principles of Ecology
Prerequisites: BIOL 1400 or 1401, 2402 or 2403, or their equivalents. Recommended corequisite: BIOL 3103. Principles of Ecology Lab. An introduction to living organisms and relationships to their environment including the structure and interactions of populations, communities, ecosystems, and the biosphere. Three hours lecture per week. Three credit hours.

BIOL 3313 Human Genetics
Prerequisites: BIOL 1400 and 1401 or BIOL 1411 and 1412 or the consent of the instructor. The basic concepts and mechanisms of human genetics in relationship to human uniqueness; impact on advances in healthcare, biotechnology; public policy, and the law. Study of genetics technology for detecting, treating, and preventing genetic disorders. This course cannot be used for credit toward a biology major or minor. Three hours lecture per week. Three credit hours.

BIOL 3391 Cooperative Education in Biology
Prerequisites: junior standing, acceptance as a biology major, minimum GPA of 2.50, and consent of the department chairperson. Cooperative education seeks to integrate academic and professional work experience. Students will be placed in a work setting consistent with their biological career objectives. This course requires a minimum of 200 semester work hours. No more than six hours independent study, undergraduate research, and/or cooperative education may be counted for biology elective credit (See “Independent Research and Study” on page 35). Three credit hours.
BIOL 3400 Developmental Biology
Prerequisites: BIOL 1400 or 1401, 2403 or their equivalents. The development of organisms including the topics of gametogenesis, fertilization, cleavage, morphogenesis, organogenesis, cell differentiation, and regeneration. These topics will be approached from both the structural point of view of classical embryology and the more recent molecular mechanistic viewpoint. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 3402 Mammalian Anatomy
Prerequisite: BIOL 2403. A study of the gross anatomy of mammalian organ systems with emphasis being placed on the human organism. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 3404 Comparative Vertebrate Morphology
Prerequisites: BIOL 1400 or 1401, 2403, or their equivalents. The comparative anatomy of selected vertebrate animals; homologous structures in various animal groups. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 3405 Invertebrate Zoology
Prerequisites: BIOL 1400 or 1401, 2403, or their equivalents. Comparative anatomy, physiology, embryology, adaptive radiation, and evolutionary relationships of invertebrate groups. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 3407 Plant Morphology
Prerequisites: BIOL 1400 or 1401, 2402, or their equivalents. A lecture-laboratory course covering the fundamental morphological characteristics of plants. The life histories and habits of the major plant groups are covered. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 3408 Vertebrate Histology
Prerequisites: BIOL 1400 or 1401, 2403, or BIOL 1411 and 1412, or their equivalents. A study of the cell and fundamental tissues; the microscopic structure of the organ systems of representative vertebrates, and emphasis on the relationship between microscopic structure and function. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 3409 Vertebrate Zoology
Prerequisites: BIOL 1400 or 1401, 2403, or their equivalents. A general study of vertebrates, including adaptations, reproduction, behavior, distribution, ecology, and taxonomy. Emphasis on Arkansas species and field studies. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 3411 Dendrology
Prerequisites: BIOL 1400 or 1401, 2402, or their equivalents. Detailed coverage of tree and other woody plant identification, recognition, classification, silvics, range, economic use, and wildlife value of native and introduced North American species. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 3199, 3299, 3399, 3499 Special Topics
Prerequisites: variable, depending on instructor and course content. Each special topics course must first be approved by the biology department, which will also decide if biology credit will be granted. The topics will represent specialized areas of study in the biological sciences. Credit will vary and will depend on the amount of time necessary to cover the topic. One to four hours lecture. One, two, three, or four credit hours.

BIOL 4190 Biology Seminar
Prerequisites: senior standing and completion of or concurrent enrollment in biology core courses. Preparation and presentation of papers including analysis and implications of investigations in the biological sciences. Required of all majors. One hour per week. One credit hour.
Biology

Biology 4401 Cell Biology
Prerequisites: BIOL 1400 or 1401, 12 additional hours in biology, CHEM 1401 or 1403; microbiology is strongly encouraged. A study of the organization of cells as related to the structure and function of biological molecules. Emphasis is placed on eukaryotic cells. Dual-listed in the UALR Graduate Catalog as BIOL 5401. Three hours lecture, three hours laboratory per week. Four credit hours.

Biology 4402 Limnology
Prerequisites: BIOL 1400 or 1401, 2402, 2403, 3303, CHEM 1403, or equivalents. A study of physical and chemical characteristics of water, morphometry and physiography of lake and stream basins and an introduction to the ecology and taxonomy of aquatic communities. Laboratory: Instruction in methods of physical, chemical, and biological sampling and analysis. Field work will include study of various types of aquatic habitats and sampling methods involved. Some extended Saturday field trips will be required. Dual-listed in the UALR Graduate Catalog as BIOL 5402. Two lectures, one four-hour laboratory per week. Four credit hours.

Biology 4403 Comparative Physiology
Prerequisites: BIOL 1400 or 1401, 2403, CHEM 1403, or the equivalents. Organ function in a wide range of organisms, including vertebrates and invertebrates. A comprehensive survey of functional relationships in more than one group of animals. Dual-listed in the UALR Graduate Catalog as BIOL 5403. Three lectures, three hours laboratory per week. Four credit hours.

Biology 4404 Mammalogy
Prerequisites: BIOL 1400 or 1401, 2403, 3404 or 3409, or their equivalents, or consent of instructor. Classification, distribution, ecology, and natural history of mammals. Emphasis on Arkansas species. Field studies, preparation of study specimens. Dual-listed in the UALR Graduate Catalog as BIOL 5404. Two hours lecture, four hours laboratory per week. Four credit hours.

Biology 4405 Ichthyology
Prerequisites: BIOL 1400 or 1401, 3404 or 3409. Classification, phylogeny, morphology, physiology, and ecology of fishes concentrating on North American and Arkansas freshwater fishes. Dual-listed in the UALR Graduate Catalog as BIOL 5405. Three lectures, three hours laboratory. Four credit hours.

Biology 4406 Pathogenic Microbiology
Prerequisites: BIOL 1400 or 1401, 2401, or their equivalents. Survey of pathogenic microbiology, immunology, and virology with emphasis on fundamental principles of each science and their application to the diagnosis and control of human diseases. Dual-listed in the UALR Graduate Catalog as BIOL 5406. Three hours lecture, two hours laboratory per week. Four credit hours.

Biology 4407 Herpetology
Prerequisites: BIOL 1400 or 1401, 3403, 3404 or 3409, or their equivalents, or consent of instructor. Classification, anatomy, distribution, ecology, and natural history of amphibians and reptiles. Field techniques, student projects, laboratory work, and curatorial training will emphasize species found in Arkansas. Dual-listed in the UALR Graduate Catalog as BIOL 5407. Two hours lecture, four hours laboratory per week. Four credit hours.

Biology 4408 Advanced Field Biology
Prerequisites: BIOL 1400 or 1401, 2402, 2403, 3303, 3409, or their equivalents. An analysis of major ecological habitats. Comparison of these areas with respect to their physiographic floral and faunal components. Emphasis on vertebrates. Students will spend an extended time in the field. Enrollment is by application only, and a separate field fee is charged. Ninety hours of lecture/laboratory/field trip activity. Four credit hours.

Biology 4409 Plant Taxonomy
Prerequisites: BIOL 1400 or 1401, 2402 or their equivalents. A study of the principles of plant identification, classification, systematics, and nomenclature. Major families of flowering plants with emphasis on the floristics of the immediate area. Dual-listed in the UALR Graduate Catalog as BIOL 5409. Two hours lecture, four hours laboratory. Four credit hours.
BIOL 4410 Fisheries
Prerequisites: BIOL 1400 or 1401, 2403, 3303 or 3409, or their equivalents, or consent of instructor. A survey of fish management and fish culture principles and techniques including population assessment, habitat improvement, pond culture, commercial fish farming, and an introduction to fish diseases. Dual-listed in the UALR Graduate Catalog as BIOL 5410. Three hours of lecture, three hours laboratory per week. Four credit hours.

BIOL 4411 Ornithology
Prerequisites: 16 hours in biology to include BIOL 2403. This course is designed to introduce students to selected aspects of avian biology. Emphasis is placed on ecology, evolutionary biology, natural history, and classification of birds. Three hours lecture, two hours laboratory per week. Weekend field trips. Dual-listed in the UALR Graduate Catalog as BIOL 5411. Four credit hours.

BIOL 4412 Plant Ecology
Prerequisites: BIOL 1400 or 1401, 2402 or 2403, 3303, or their equivalents. Study of plant species ecology (life history and reproductive biology) and vegetation ecology (abundance, structure, dispersion, patterns, and dynamics), with emphasis on quantitative methodology and management principles. Dual-listed in the UALR Graduate Catalog as BIOL 5412. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 4413 Immunology
Prerequisites: BIOL 1400 or 1401, 2401, CHEM 1402, 1403. Immunobiology and immunochemistry of humoral and cellular mechanisms of immunity. Dual-listed in the UALR Graduate Catalog as BIOL 5413. Three hours lecture, two hours laboratory per week. Four credit hours.

BIOL 4414 Biological Methods and Instrumentation
Prerequisites: junior standing (60 hours to include 20 hours of biology including 2401, 3300), eight hours of chemistry. A hands-on study of modern biological experimentation. Designed to allow students to perform experiments using radioisotopes, electrophoresis, centrifugation, chromatography, RIA, ELISA, respirometry, enzyme assays and spectrophometric analysis, with an emphasis on computer analysis of data. Each student will complete an individual research project. Two hours lecture, four hours laboratory. Four credit hours.

BIOL 4415 Biometry
Prerequisites: 12 hours of biology, environmental health science, or earth science (in combination or singularly); MATH 1302 or higher numbered mathematics course; three hours of statistics; or consent of instructor. Graduate standing required if student enrolled in 5415. A computer based course in experimental design, data analysis, and interpretation. The objective of the course is to teach the application of statistical procedures relevant to the academic emphasis of students, not statistics per se. Designed to be especially beneficial to those students planning to seek an advanced degree upon completion of their baccalaureate or to go into quality control or research positions. Dual-listed in the UALR Graduate Catalog as BIOL 5415. Two hours lecture and four hours laboratory. Four credit hours.

BIOL 4416 Microscopy
Prerequisites: 15 hours of biology. Graduate standing if student enrolled in 5416. A laboratory course in the fundamental theory and practical application of light and electron microscopy including specimen preparation, photomicrography, and digital computer image processing and enhancement. Topics include brightfield, darkfield, phase, differential interference, contrast, polarized and epi fluorescent light microscopy, and scanning and transmission electron microscopy. Strong emphasis is placed on experimental design and use of the microscope as an experimental tool. Dual-listed in the UALR Graduate Catalog as BIOL 5416. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 4417 Molecular Biology
Prerequisites: 19 hours in biology including both BIOL 2401 and 3300; CHEM 1401 or 1403. Successful completion of either BIOL 3400 or 4401 is strongly encouraged. If taken for graduate credit, the prerequisites also include a BS in biology or permission of the instructor. A study of molecular biology theory and practice. Emphasis is on the study of model systems to understand the current approaches and laboratory techniques necessary to answer basic questions in current molecular biology. Dual-listed in the UALR Graduate Catalog as BIOL 5417. Two hours of lecture and four hours of laboratory per week. Four credit hours.

BIOL 4418 Biotechnology
Prerequisites: 19 hours of biology including 2401 and 3300; CHEM 1401 or 1403. BIOL 3400 and 4401 are strongly recommended. BIOL 4417 is also recommended or may be taken concurrently. A study of the applied science of biotechnology designed to introduce students to the elements of a biotechnological career. Topics range from traditional biotechnology such as animal and plant tissue culture to contemporary molecular biotechnology and the use of recombinant DNA technology and genetic engineering in research and industry. Emphasis will be placed on current biomedical, pharmaceutical, and agr/industrial applications. Graduate students must complete and defend a term paper. Dual-listed in the UALR Graduate Catalog as BIOL 5418. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 4419 Plant Physiology
Prerequisites: BIOL 1400 or 1401, 2402, CHEM 2450, or their equivalents, or consent of instructor. Study of water relations, nutrition, and metabolism including photosynthesis, growth, and development. Dual-listed in the UALR Graduate Catalog as BIOL 5419. Two hours lecture, four hours laboratory per week. Four credit hours.

BIOL 4420 General Biochemistry
See CHEM 4420.

BIOL 4421 Introduction to Geographic Information Systems (GIS)
Prerequisites: ERSC 2320 or ENHS 4415 or BIOL 4309, or consent of instructor. This course introduces Geographic Information Systems (GIS) and the use of spatial data for problem-solving in science. The lecture portion of the course focuses on the data models used to represent spatial features and on the processes involved in creating, acquiring, analyzing, and displaying georeferenced information. The laboratory portion of the course employs a project-based methodology including applications from geology, biology, environmental science, and political science to foster basic GIS software proficiency. Dual-listed in the UALR Graduate Catalog as BIOL 5421. Two hours lecture per week, four laboratory hours. Four credit hours.

BIOL 4422 Mammalian Physiology
Prerequisites: BIOL 1400 or 1401, 2403, Chemistry 1403, and BIOL 2401 or their equivalents. General physiological principles and a treatment of functions and interrelations of mammalian systems. Dual-listed in the UALR Graduate Catalog as BIOL 5422. Three hours lecture, two hours laboratory. Four credit hours.

BIOL 4423 Plant Anatomy
Prerequisites: BIOL 1400 or 1401, 2402, or their equivalents. Detailed coverage of the microscopic anatomy of all the organs of seed plants and a critical evaluation of the major tissue types found within these plant organs. Dual-listed in the UALR Graduate Catalog as BIOL 5423. Two hours lecture, four hours laboratory. Four credit hours.

BIOL 4424 Entomology
Prerequisites: BIOL 1400 or 1401, 2403, or their equivalents. A study of insects including their anatomy, physiology, behavior, development, diversity, classification, and economic importance. Dual-listed in the UALR Graduate Catalog as BIOL 5424. Two hours lecture, four hours laboratory. Four credit hours.
Courses in Gulf Coast Research Laboratory (BIOL)

BIOL 3450 Introduction to Marine Zoology
Prerequisite: eight hours of biological science. A general introduction to the marine environment with emphasis on local fauna. Introduction to the marine environment and some of its physical, chemical, geological, and ecological characteristics that affect marine life. Emphasis on local fauna and estuarine species. Four credit hours.

BIOL 3550 Oceanography II: Marine Biology
Prerequisite: eight credit hours of biological science. An overview of biological oceanography with emphasis on organisms, habitats, and fisheries of the Mississippi Sound and the Gulf of Mexico. Five credit hours.

BIOL 4151, 4251, 4351 Special Problems in Marine Science
Prerequisites: to be set by problem director. Special problems are research oriented, and grades are based on reports submitted by students. Students who want to take a special problems course must submit a brief proposal of planned study to the GCRL registrar. Special problems proposal forms are available from the GCRL registrar. This proposal must be approved by the student’s UALR advisor and the GCRL staff member directing the study. One, two, or three credit hours.

BIOL 4352 Coastal Vegetation
Prerequisite: 10 hours of biology including general botany. A broad study of the general and specific aspects of coastal vegetation, with emphasis on local examples such as tidal marshes, swamps, savannahs, woodlands, strand and island (insular) vegetation, and certain unique and peculiar areas. Vegetation composition, variation, succession, climax, and distribution, including survey and descriptive methods. Aerial techniques, ground truth, plant identification, delineation of vegetation types, and mapping. Three credit hours.

BIOL 4450 Marine Botany
Prerequisite: 10 credit hours of biology, including botany. A survey, based on local examples, of the principal groups of marine algae and marine flowering plants, treating structure, reproduction, distribution, identification, and ecology. Four credit hours.

BIOL 4451 Comparative Histology of Marine Organisms
Prerequisites: general histology, consent of instructor. A detailed study of the histological organization of representative marine organisms. Fixation, processing, and study of tissues using light microscopy, transmission electron microscopy, and scanning electron microscopy. The relationship between structural changes and physiological changes during life cycle of organism. Histopathology with respect to tissue responses to infection and damage by toxic agents. Four credit hours.

BIOL 4452 Marine Fisheries Management
Prerequisite: 16 hours of biological science or consent of instructor. Practical marine fishery management problems. Trends in human population numbers, aggregations, and life styles with associated environmental impacts and resource allocation implications, which pose complex problems for fishery management scientists and administrators. International and local legal, political, social, and economic factors, as well as biological potential, must be considered in making rational decisions toward achieving optimum yield from marine fishery resources. The history of management scheme successes and failures, sources of information, and the current status of fishing technology, mariculture, management methods, legal problems, and educational needs will be explored. Four credit hours.
BIOL 4453 Behavior and Neurobiology of Marine Animals
Prerequisite: 16 credit hours of zoology or consent of instructor. Survey of behavior, neuroanatomy, and neurophysiology of marine animals with emphasis on the neural mechanisms underlying the behavior of selected invertebrates, fishes, birds, and mammals. Introduction to the experimental study of the behavior of marine animals in the field and laboratory. When possible, students will carry out independent studies on local species. Neural mechanisms underlying behavior; the anatomy and physiology of the nervous systems of marine invertebrates and vertebrates. Four credit hours.

BIOL 4454 Fauna and Faunistic Ecology of Tidal Marshes
Prerequisite: 16 credit hours of biological science or consent of instructor. Survey and discussion of the taxonomy, distribution, trophic relationships, reproductive strategies, and adaptation of tidal marsh animals with emphasis on those occurring in northern Gulf marshes. Four credit hours.

BIOL 4455 Early Life History of Marine Fishes
Prerequisites: ichthyology, fisheries, biology, ecology, or consent of instructor. Reproductive strategies and early developmental processes of marine fishes. Includes discussion of temporal and spatial distribution patterns, population dynamics, and ecological interactions of fish eggs and larvae; role of early stages of fishes in fisheries oceanography, marine ecology, and systematics; methods of sampling and identifying fish eggs and larvae; data quantification and analysis; rearing experiments; techniques for studying larval fish dynamics. Four credit hours.

BIOL 4456 Salt Marsh Plant Ecology
Prerequisites: general botany, plant taxonomy, plant physiology, general ecology, or consent of instructor. Botanical aspects of local marshes. Plant identification, composition, structure, distribution, and development of coastal marshes. Biological and physical interrelationships. Primary productivity and relation of marshes to estuaries and associated fauna. Four credit hours.

BIOL 4457 Marine Immunology
Prerequisite: general microbiology. An introduction to the role of marine microorganisms in the ecology of oceans and estuaries. Emphasis on laboratory sampling equipment, methods of processing samples, and laboratory techniques useful in studying marine microorganisms. Three credit hours.

BIOL 4458 Marine Microbiology
Prerequisites: general microbiology, consent of instructor. Introduction to marine microorganisms and pertinent literature sources. The role of microorganisms in the ecology of oceans and estuaries is stressed. Use of laboratory sampling equipment, methods of processing samples, and laboratory techniques useful in studying marine microorganisms. Five credit hours.

BIOL 4459 Marine Biology
Prerequisite: 16 credit hours of biological science including general zoology, general botany, and invertebrate zoology. A consideration of the relationship of marine organisms to their environment. The effects of temperature, salinity, light, nutrient concentration, currents, food, predation, and competition on the abundance and distribution of marine organisms are considered. Five credit hours.

BIOL 4460 Marine Invertebrate Zoology
Prerequisites: 16 credit hours of zoology, including an introductory course in invertebrate zoology. A concentrated study of the important free-living marine and estuarine invertebrates of the northeastern Gulf of Mexico, with emphasis on the structure, classification, phylogenetic relationships, larval development, and functional processes. Six credit hours.

BIOL 4461 Marine Vertebrate Zoology and Ichthyology
Prerequisites: 16 credit hours of zoology including comparative morphology or consent of instructor. A general study of the marine chordata, with emphasis on fish including lower groups, mammals, and birds. Groups of vertebrates occurring in the area associated with marine environments, with taxonomic characteristics used in their classification and identification, and with functional adaptations of the organisms. Greatest emphasis is placed on local fishes. For obvious reasons, no conscious attempt is made to duplicate material which could be offered with ease to the student at his or her home institution. Every effort is made to take advantage of the unique teaching situation that the area provides. Six credit hours.

BIOL 4462 Parasites of Marine Animals
Prerequisites: general parasitology or consent of instructor. A study of the parasites of marine and estuarine animals with emphasis on morphology, taxonomy, life histories, and host-parasite relationships. Six credit hours.

BIOL 4463 Aquaculture
Prerequisites: 16 credit hours of biology, including invertebrate zoology, natural history of vertebrates, or ichthyology. A review of the technology, principles, and problems relating to the science of aquaculture, with emphasis on the culture of marine species. Six credit hours.

UAMS Molecular Biotechnology Courses (BIOM)

BIOM 3210 Laboratory Principles and Techniques
Prerequisite: admission to the professional program in medical technology or molecular biotechnology. Introduction to principles and techniques used in clinical and research laboratories. Emphasis on laboratory mathematics, safe practices, and basic instrumentation. Two hours lecture per week. Two credit hours.

BIOM 3211 Introduction to Research
Prerequisite: admission to the professional program in medical technology or molecular biotechnology. How to design, conduct, and interpret life science research including planning biomedical research, the principles of statistical design, sample size estimation, and designs in life science research. Also includes the correspondence between objectives, design and analysis. Two lecture hours per week. Two credit hours.

BIOM 4106 Technology Transfer
Prerequisites: admission to the professional program in molecular biotechnology and UALR BIOL 4417 and BIOL 4418. Overview of the conversion from research to manufacturing, including regulatory environment in which the production occurs. One hour lecture. One credit hour.

BIOM 4305 Cell Culture Principles and Techniques
Prerequisites: admission to the professional program in molecular biotechnology and UALR BIOL 4417 and BIOL 4418. Introduction to principles and techniques of cell culture. Explores protocols for the culture, cloning, and selection of cells. Includes basic cell biology, growth characteristics and requirements, cell passing, and quantitation. Two hours lecture, three hours laboratory per week. Three credit hours.

BIOM 4507 Biotechnology Laboratory Internship
Prerequisites: admission to the professional program in molecular biotechnology and UALR BIOL 4417 and 4418. Supervised experience in a biotechnology research laboratory. Emphasis on manual and automated techniques and development of professional behavior. Includes research principles and techniques, laboratory organization, and materials management. Twenty clinic hours per week. Five credit hours.
The B.S. degree in Environmental Health Sciences program is designed to prepare students for a broad range of career opportunities in the environmental profession. With a total of 26 hours of approved electives, students can focus on their individual career objective. Although the curriculum prepares students to be immediately competitive for environmental employment upon graduation, it also emphasizes research and creates a foundation for those seeking graduate degrees in the environmental field. Employment opportunities are available both in the public and private sectors. Courses within the curriculum emphasize development of environmental skills in both field and laboratory settings. These environmental skills include permitting, impact analysis, restoration ecology, sampling, computer modeling, epidemiology, planning, energy analysis, toxicology, risk assessment, research methods, information dissemination, and best management practices. Both cooperative education and internship experiences are available for majors. A student chapter of the National Association of Environmental Professionals provides opportunities for professional growth and community service involvement.

**General Information**

**Admission Requirements**

To major in Environmental Health Sciences, a student must have completed a minimum of 15 credit hours at the University of Arkansas at Little Rock with a cumulative GPA of 2.00 or better and must have completed both ENHS 2320 and ENHS 2120 with a grade of “C” or better. Any decisions concerning environmental health science course equivalencies will be made by the Program Director.

**Combined Major-Minor in Environmental Health Sciences and Biology**

The B.S. degree in Environmental Health Sciences is a combined major-minor in Environmental Health Sciences and Biology. Therefore, a minor is not required for the Environmental Health Sciences major, but a separate minor can still be selected. Requirements for the Environmental Health Sciences major include the following: (1) Basic Sciences – 29 credit hours; (2) Core – 11 credit hours; (3) Environmental Media – 6 credit hours; (4) Environmental Analysis and Risk Assessment – 8 credit hours; (5) Biology Electives (Approved) – 11 credit hours; and (6) General Electives (Approved) – 15 credit hours.

**Minor in Environmental Health Sciences**

A minor in Environmental Health Sciences requires 18 credit hours, including ENHS 2320, Introduction to Environmental Health Sciences, ENHS 2120, Introduction to Environmental Health Sciences Laboratory, and ENHS 3310, Environmental Regulations. A grade of “C” or better is required for both ENHS 2320 and ENHS 2120 prior to enrollment in any upper level ENHS courses. The remaining 11 credit hours are course electives from the ENHS program. Elective hours must be approved by the Program Director. Some environmental health science elective courses may require completion of prerequisites other than ENHS 2320, ENHS 2120, and ENHS 3310.

**BACHELOR OF SCIENCE IN ENVIRONMENTAL HEALTH SCIENCES**

**Major/Minor Environmental Health Sciences and Biology (No minor required)**

**Core Curriculum (44 hours) – College Algebra Required (Math 1302 or equivalent)**

**Basic Sciences – Course Requirements (29 hours) 8 hours included in University Core**

- BIOL 1401 Science of Biology or BIOL 1400 Evolutionary and Environmental Biology
- BIOL 2401 Microbiology
- BIOL 2402 or BIOL 2403
- BIOL 3303 and 3103 Ecology
- or CHEM 1402 General Chem I, CHEM 1403 General Chem II, and CHEM 3350 and 3150 General Organic Chem I (Lecture and Laboratory)
- CPSC 1370 Computer Literacy
- PHYS 1321 Elementary Physics
- STAT 2350 Introduction to Statistical Methods

**Environmental Health Sciences Core (11 hours)**

- ENHS 2320 Introduction to Environmental Health Sciences
- ENHS 2120 Introduction to Environmental Health Sciences Laboratory
- ENHS 3310 Environmental Regulations
- ENHS 4389 Research in Environmental Health Sciences
- ENHS 4190 Seminar in Environmental Health Sciences
Environmental Media (6 hours, select two courses)
ENHS 3350 Principles of Air Pollution
ENHS 3340 Introduction to Water Resources Management
BIOL 4314/5314 Soil Biology

Environmental Analysis and Risk Assessment (8 hours, select two courses)
ENHS 4415/5415 Environmental Impact Analysis
ENHS 4410/5410 Environmental Planning
ENHS 4430/5430 Epidemiology: Environment and Health

Biology Electives (11 hours)
Recommended: BIOL 3400, BIOL 3408, BIOL 4402, BIOL 4406, BIOL 4413, BIOL 4424 (Approval of Program Director Required)

General Electives (15 hours)
Recommended: ERSC 4421, ERSC 4422, RHET 3326, PSYC 3308 (Approval of Program Director Required)

BS Degree in Environmental Health Sciences

Combined Major-Minor (Environmental Health Sciences and Biology)

Recommended Curriculum Sequence

First Semester (16 credit hours)
RHET 1311 Composition I (3 hours)
MATH 1302 College Algebra (3 hours)
HIST 1311 History of Civilization I (3 hours)
BIOL 1400 Evolutionary and Environmental Biology or BIOL 1401 Science of Biology (4 hours)
CPSC 1370 Computer Literacy (3 hours)

Second Semester (17 credit hours)
RHET 1312 Composition II (3 hours)
General Elective (3 hours)
SPCH 1300 Speech Communication (3 hours)
CHEM 1400 Fundamental Chemistry I or CHEM 1402 General Chemistry I (4 hours)
ENHS 2320 Introduction to Environmental Health Sciences (3 hours)
ENHS 2120 Introduction to Environmental Health Sciences Laboratory (1 hr)

Third Semester (17 credit hours)
HIST 1312 History of Civilization II (3 hours)
PHYS 1321 Elementary Physics I (3 hours)
CHEM 1401 Fundamental Chemistry II or CHEM 1403 General Chemistry II (4 hours)
ENHS 3310 Environmental Regulations (3 hours)
BIOL 2402 Botany or BIOL 2403 Zoology (4 hours)

Fourth Semester (17 credit hours)
STAT 2350 Statistical Methods (3 hours)
BIOL 2401 Microbiology (4 hours)
ENHS 3340 or ENHS 3350 or BIOL 4314 (3 hours)
BIOL 3303 and BIOL 3103 Ecology Lecture and Laboratory (4 hours)
ARHA 2305 Art History or THEA 2305 Introduction to Theater or MUHL 2305 Introduction to Music (3 hours)

Fifth Semester (15 credit hours)
CHEM 2450 Organic Survey or CHEM 3350 General Organic Chemistry I and CHEM 3150 General Organic I Lab (4 hours)
BIOL Elective (4 hours)
ENHS 4415 Environmental Impact Analysis or ENHS 4410 Environmental Planning or ENHS 4430 Epidemiology: Environment and Health (4 hours)
POLS 1310 American National Government or HIST 2311 or HIST 2312 (3 hours)

Sixth Semester (14 credit hours)
BIOL Elective (3 hours)
General Elective (4 hours)
SOCI 2300 Introduction to Sociology (3 hours)
ENHS 4415 Environmental Impact Analysis or ENHS 4410 Environmental Planning or ENHS 4430 Epidemiology: Environment and Health (4 hours)

Seventh Semester (14 credit hours)
PSYC 2300 Introduction to Psychology (3 hours)
General Elective (4 hours)
BIOL Elective (4 hours)
ENHS 4389 Research in Environmental Health Sciences (3 hours)

Eighth Semester (14 credit hours)
ENHS 3340 or ENHS 3350 or BIOL 4314 (3 hours)
ENHS 4190 Seminar in Environmental Health Sciences (1 hr) General Elective (4 hours)
ARHA 2305 Art History or THEA 2305 Introduction to Theater or MUHL 2305 Introduction to Music (3 hours)
ENGL 2337 or ENGL 2338 or PHIL 2320 (3 hours)
Courses in Environmental Health Sciences (ENHS)

ENHS 2320 Introduction to Environmental Health Sciences
Prerequisites: BIOL 1401 or BIOL 1400, MATH 1302, CPSC 1370. This course is designed to provide individuals with the basic elements of environmental health sciences. Lectures will be presented concerning environmental media assessment, water supplies, water quality, air pollution, environment and energy relationships, land use, and environmental impact analysis. Three hours lecture per week. Three credit hours.

ENHS 2120 Introduction to Environmental Health Sciences Laboratory
Prerequisite or Corequisite: Completion of ENHS 2320 with a grade of “C” or better or consent of the instructor and concurrent enrollment in ENHS 2320. The introduction to environmental health sciences laboratory will emphasize experiments, field-based data collection and analysis methods, computer exercises, and laboratory methods. Two hours laboratory per week. One credit hour.

ENHS 3310 Environmental Regulations
Prerequisite: ENHS 2320 or equivalent. The basis for regulation of environmental pollutant sources and natural resources. The environmental litigation process is reviewed with reference to appropriate federal, state, and local regulations. Case studies will be used to supplement class lectures. Three hours lecture per week. Three credit hours.

ENHS 3340 Introduction to Water Resources Management
Prerequisites: ENHS 2320, CHEM 1403, BIOL 2401, MATH 1302, or the equivalents. Concepts related to the management of surface and ground water resources; sources of environmental pollutants, sampling methods and pollution control alternatives; the application of computers to water resource management problems. Three hours lecture per week. Three credit hours.

ENHS 3350 Principles of Air Pollution
Prerequisites: ENHS 2320, CHEM 1403, MATH 1302, or the equivalents. The principles of air quality monitoring, air pollution transport and control methods; effects of air pollutants on health and natural resources; dispersion modeling techniques. Three hours lecture per week. Three credit hours.

ENHS 3391 Cooperative Education in Environmental Health Sciences
Prerequisites: junior standing, acceptance as an environmental health sciences major, minimum GPA of 2.50, and consent of program director. Cooperative education seeks to integrate academic and professional work experiences. Students will be placed in a work setting consistent with their environmental education career objectives. This course requires a minimum of 200 semester work hours. Three credit hours.

ENHS 4189, 4289, 4389 Research in Environmental Health Sciences
Prerequisites: senior standing, consent of instructor. For students who want to carry out individual research. The student is expected to spend two to four hours per week on the project for each hour of credit earned. The exact hourly commitment per week will depend on the nature of the project and will be agreed on in advance by the student and the instructor. One, two, or three credit hours.

ENHS 4190 Seminar in Environmental Health Sciences
Prerequisites or corequisites: ENHS 2320, 4415, senior standing, consent of instructor. Discussions of current and emerging environmental health sciences problems. One hour of discussion per week. One credit hour.

ENHS 4320 Introduction to Industrial Hygiene
Prerequisites: ENHS 3310, CHEM 2450 or 3350 and 3150, MATH 1302, or the equivalents. Recognition, evaluation, and control methods for environmental hazards in the workplace; instrumentation techniques for personal and ambient sampling. Regulations appropriate to industrial hygiene are reviewed for various work settings. Three hours lecture per week. Three credit hours.

ENHS 4391 Cooperative Education in Environmental Health Sciences
Prerequisites: junior standing, major in environmental health sciences, minimum GPA of 2.50, minimum of one semester of ENHS 3391, and consent of program director. Cooperative education seeks to integrate academic and professional work experiences. Students will be placed in a work setting consistent with their environmental education career objectives. This course requires a minimum of 200 semester work hours. Three credit hours.

ENHS 4199-4399 Special Topics in Environmental Health Sciences
Prerequisite: senior standing as environmental health sciences major or consent of instructor. Topics include specialized areas of environmental health sciences. Credit will vary and will be appropriate for both advanced undergraduate and graduate students. Dual-listed in the UALR Graduate Catalog at the 5000-level. One, two, or three hours lecture per week. One, two, or three credit hours.

ENHS 4410 Environmental Planning
Prerequisite: ENHS 3310 or the equivalent. Environmental planning process and evaluation methods applicable to environmental programs; resource allocation and procurement; emphasis on environmental planning case studies including watershed planning, land use, solid and hazardous waste, air quality, wastewater treatment facilities planning, wetlands, and master planning. Group discussions and role-playing exercises will supplement class lectures. Dual-listed in the UALR Graduate Catalog as ENHS 5410. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4415 Environmental Impact Analysis
Prerequisites: ENHS 3340 or 3350, RHET 3316, BIOL 3303 and 3103, STAT 2350, or consent of instructor. Knowledge and skills necessary to prepare and review environmental impact assessments and statements. The content of the National Environmental Policy Act is presented and analyzed. Case studies and group discussions are used to supplement class lectures. Field studies are performed on a selected site for which an environmental impact assessment will be written. Dual-listed in the UALR Graduate Catalog as ENHS 5415. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4430 Environmental Epidemiology
Prerequisites: ENHS 3340 or 3350, BIOL 2401, STAT 2350, or consent of instructor. The principles of environmental epidemiology are introduced with emphasis on application to various environmental settings. A brief introduction to vital statistics is provided. Health effects of various environmental agents will be identified with appropriate indicators and epidemiological methods for environmental health sciences professionals to monitor environmental effects. Dual-listed in the UALR Graduate Catalog as ENHS 5430. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4295-4695 Internship in Environmental Health Sciences
Prerequisites: ENHS 3310 or equivalent. The basis for regulation of environmental pollutant sources and natural resources. The environmental litigation process is reviewed with reference to appropriate federal, state, and local regulations. Case studies will be used to supplement class lectures. Dual-listed in the UALR Graduate Catalog as ENHS 5410. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4415 Environmental Impact Analysis
Prerequisites: ENHS 3340 or 3350, RHET 3316, BIOL 3303 and 3103, STAT 2350, or consent of instructor. Knowledge and skills necessary to prepare and review environmental impact assessments and statements. The content of the National Environmental Policy Act is presented and analyzed. Case studies and group discussions are used to supplement class lectures. Field studies are performed on a selected site for which an environmental impact assessment will be written. Dual-listed in the UALR Graduate Catalog as ENHS 5415. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4430 Environmental Epidemiology
Prerequisites: ENHS 3340 or 3350, BIOL 2401, STAT 2350, or consent of instructor. The principles of environmental epidemiology are introduced with emphasis on application to various environmental settings. A brief introduction to vital statistics is provided. Health effects of various environmental agents will be identified with appropriate indicators and epidemiological methods for environmental health sciences professionals to monitor environmental effects. Dual-listed in the UALR Graduate Catalog as ENHS 5430. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4295-4695 Internship in Environmental Health Sciences
Prerequisites: ENHS 3310 or equivalent. The basis for regulation of environmental pollutant sources and natural resources. The environmental litigation process is reviewed with reference to appropriate federal, state, and local regulations. Case studies will be used to supplement class lectures. Dual-listed in the UALR Graduate Catalog as ENHS 5410. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4415 Environmental Impact Analysis
Prerequisites: ENHS 3340 or 3350, RHET 3316, BIOL 3303 and 3103, STAT 2350, or consent of instructor. Knowledge and skills necessary to prepare and review environmental impact assessments and statements. The content of the National Environmental Policy Act is presented and analyzed. Case studies and group discussions are used to supplement class lectures. Field studies are performed on a selected site for which an environmental impact assessment will be written. Dual-listed in the UALR Graduate Catalog as ENHS 5415. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4430 Environmental Epidemiology
Prerequisites: ENHS 3340 or 3350, BIOL 2401, STAT 2350, or consent of instructor. The principles of environmental epidemiology are introduced with emphasis on application to various environmental settings. A brief introduction to vital statistics is provided. Health effects of various environmental agents will be identified with appropriate indicators and epidemiological methods for environmental health sciences professionals to monitor environmental effects. Dual-listed in the UALR Graduate Catalog as ENHS 5430. Three hours lecture, two hours laboratory per week. Four credit hours.

ENHS 4295-4695 Internship in Environmental Health Sciences
Prerequisites: ENHS 3310 or equivalent. The basis for regulation of environmental pollutant sources and natural resources. The environmental litigation process is reviewed with reference to appropriate federal, state, and local regulations. Case studies will be used to supplement class lectures. Dual-listed in the UALR Graduate Catalog as ENHS 5410. Three hours lecture, two hours laboratory per week. Four credit hours.
The department is organized with the following objectives in view:

1. to increase the general cultural background of all students;
2. to prepare chemistry majors for graduate study, industrial work, or positions with professional ratings in government service;
3. to provide the basic training for professional students in medicine, dentistry, engineering, pharmacy, and other professional fields; and
4. to prepare high school chemistry teachers.

The department’s bachelor of science degree is certified by the American Chemical Society (ACS). Students earning this degree will be certified to the ACS for full membership on graduation.

The department sponsors a student affiliate chapter of the ACS. Any student enrolled in a program of study leading to a bachelor’s degree in chemistry or a related discipline is eligible for membership. The chapter serves as a focal point for those interested in the field of chemistry and offers them opportunities for practical experience and professional contacts.

General Information

Admission Requirements

The department welcomes students to the bachelor of arts (BA) and bachelor of science (BS) programs of study who express an interest, demonstrate an aptitude, and are dedicated to pursue excellence in their studies. Most applicants will have at least a 2.00 cumulative grade point average in their college work. They will have earned a grade of C or greater in College Algebra, its equivalent, or a more advanced mathematics course. They will have earned grades of B or better in CHEM 1400 & 1401 or equivalents, or a grade of C or greater in CHEM 1402 or equivalent. Aptitude and dedication can also be demonstrated by presenting exceptional science and mathematics preparation in high school.

Honors Program in Chemistry

The department also offers an honors program in chemistry. To graduate with honors a student must

• maintain an overall grade point average of 3.20 or greater,
• maintain a grade point average of 3.20 or greater in chemistry courses,
• complete at least four credit hours of a faculty-directed laboratory research project and present the findings in a scientific meeting or departmental seminar, and
• meet ACS certification requirements.

Major in Chemistry

The BS in chemistry requires at least 34 hours in chemistry above the freshman level including: CHEM 2310, 2311, 3150, 3170, 3171, 3250, 3340, 3350, 3351, 3370, 3371, 4190, 4340, and 4411. Required courses outside of the chemistry department are PHYS 2321, 2121, 2322, 2122, and MATH 1451, 1452, 2453. Additional requirements for ACS certification are: six credit hours of advanced chemistry courses to include CHEM 4420 Biochemistry, two hours of undergraduate research, and a three-hour upper-level mathematics course. A second language or a computer language is encouraged but not required. A minor is not required for this curriculum.

The BA in chemistry is offered for premedical and predental students, secondary teachers, and others. Requirements for this degree include the Core Requirements (44 hours), Second Language Proficiency, 26 hours above the freshman level including CHEM 2310, 2311, 3150, 3151, 3340, 3350, 3351, 3572, 4190, and three hours of upper-level chemistry electives. Required courses in Physics are PHYS 1321, 1121, 1322, 1122. MATH 1451 is the only required mathematics courses, but one or two semesters of calculus are strongly recommended. A minor in biology is recommended for this program.

Secondary Teacher Licensure in Science Education

This concentration is designed to prepare students for certification in secondary education. Chemistry is the major emphasis and this program meets the requirements for a BA in chemistry. Earth sciences is the secondary emphasis as prescribed by Arkansas law. A minor in secondary education is required. For additional information review see “Secondary Teacher Licensure.” For freshmen and sophomores who are interested or think they may be interested in teaching, please see the UALRTEACH web site or email ualrteach@ualr.edu to obtain information on the introductory one-hour courses, steps 1 and 2.
Minor in Chemistry

A minor in chemistry requires a minimum of 22 hours, to include CHEM 1402, CHEM 1403, CHEM 2310, CHEM 2311 or CHEM 4420, CHEM 3350, CHEM 3150, CHEM 3351, and CHEM 3151 or equivalent courses.

Transfer Students

Transfer students must meet all degree requirements. In addition, transfer students must successfully complete at UALR a minimum of six hours of upper-level chemistry courses for a major in chemistry or three hours of upper-level chemistry courses for a minor in chemistry.

Options in Freshman Chemistry

Students planning to enroll in CHEM 1402 must meet the minimum score on a placement exam. The placement exam may be offered on-line so students can take it prior to attempting to enroll in CHEM 1402. The department’s website, http://ualr.edu/chemistry/ has information how to take the exam.

Students who have had two units of high school algebra and high school chemistry and meet the minimum score on the chemistry placement test should start with CHEM 1402 and 1403.

Students who have had no high school chemistry and have a weak high school mathematics background but are interested in a pre-professional or science degree should take CHEM 1300, 1402, and 1403.

Students whose major field requires only eight hours of freshman chemistry should take CHEM 1400 and 1401. This sequence will prepare a student to take CHEM 2450 Organic Survey, but not other upper-level chemistry courses.

Graduate Programs

The department also offers the master of arts and the master of science degrees in chemistry and cooperates with the Department of Applied Science in offering the applied science PhD in applied chemistry. Consult the UALR Graduate Catalog for a description of these programs, as well as policies governing UALR graduate programs.

Academically talented undergraduate chemistry students may schedule courses on an accelerated basis and enroll in selected graduate courses in their senior year. Students may receive a master’s degree one year after completing the BS degree. This program is an option only for students who have excellent academic records for the first three years of undergraduate study and have completed the suggested 108 hours of undergraduate work through the junior year. Permission for early enrollment in graduate courses in the senior year must be obtained from the dean of the Graduate School on recommendation of the department chairperson. Students registered for graduate credit in dual-listed (4000/5000) courses are responsible for additional assigned work. Details of the bachelor’s/ master’s program, including a suggested five-year sequence, are available from the chemistry department office.

Bachelor of Science Degree-ACS Certification Recommended Sequence

Freshman Year (32 hours)

CHEM 1402 General Chemistry I
CHEM 1403 General Chemistry II
MATH 1451 Calculus I
MATH 1452 Calculus II
HIST 1311 History of Civilization I
HIST 1312 History of Civilization II
RHET 1311 Composition I
RHET 1312 Composition II
BIOL 1401 Science of Biology

Sophomore Year (33 hours)

CHEM 2310 Analytical Chemistry I
CHEM 2311 Analytical Chemistry II
CHEM 3350 General Organic Chemistry I
CHEM 3351 General Organic Chemistry II
CHEM 3150 Organic Chemistry Laboratory I
CHEM 3250 Qualitative Organic Analysis Laboratory
MATH 2453 Calculus III
SPCH 1300 Speech Communication
PHYS 2321 Physics for Scientists and Engineers I
PHYS 2322 Physics for Scientists and Engineers II
PHYS 2121 Physics for Scientists and Engineers I Laboratory
PHYS 2122 Physics for Scientists and Engineers II Laboratory
MATH Elective (3 hours)

Junior Year (29 hours)

CHEM 3370 Physical Chemistry: Thermodynamics and Kinetics
CHEM 3371 Physical Chemistry: Quantum and Statistical Mechanics
CHEM 3170 Physical Chemistry Laboratory I
CHEM 3171 Physical Chemistry Laboratory II
CHEM 3340 Introduction to Inorganic Chemistry
Upper-level (3000-4000) elective (6 hours)

Two of the following courses:
ARHA 2305 Introduction to Visual Art
or MUHL 2305 Introduction to Music
or THEA 2305 Introduction to Theatre and Dance
HIST 2311 U.S. History to 1877
or HIST 2312 U.S. History since 1877
or POLS 1310 American National Government
ENGL 2337 World Literature
or ENGL 2338 World Literature Themes
or PHIL 2320 Ethics and Society

Senior Year (30 hours)

CHEM 4340 Inorganic Chemistry

Social sciences core courses (6 hours)
Upper-level electives (10 hours)
CHEM 4411 Instrumental Analysis
CHEM 4190 Chemistry Seminar
CHEM 4420 Biochemistry
CHEM 4289, 4389, 4489 Undergraduate Research
BACHELOR OF ARTS DEGREE, CHEMISTRY MAJOR RECOMMENDED SEQUENCE

Freshman Year (32 hours)
CHEM 1402 General Chemistry I
CHEM 1403 General Chemistry II
BIOL 1401 Science of Biology
BIOL 2401 Microbiology, or BIOL 2402 Botany
or BIOL 2403 Zoology
MATH 1303 Trigonometry
MATH 1451 Calculus I
RHET 1311 Composition I
RHET 1312 Composition II
SPCH 1300 Speech Communication

Sophomore Year (31 hours)
CHEM 2310 Analytical Chemistry I
CHEM 2311 Analytical Chemistry II
CHEM 3350 General Organic Chemistry I
CHEM 3150 Organic Chemistry Laboratory I
CHEM 3351 General Organic Chemistry II
CHEM 3151 Organic Chemistry Laboratory II
HIST 1311 History of Civilization I
HIST 1312 History of Civilization II
PHYS 1321 Elementary Physics I
PHYS 1322 Elementary Physics II
PHYS 1121 Elementary Physics I Laboratory
PHYS 1122 Elementary Physics II Laboratory
Second Language (3 hours)

Junior Year (32 hours)
CHEM 3572 Physical Chemistry for the Life Sciences
Upper-level electives (6 hours)
HIST 2311 U.S. History to 1877, HIST 2312 U.S. History since 1877, or POLS 1310 American National Government
Two of the following courses:
ARHA 2305 Introduction to Visual Art
or MUHL 2305 Introduction to Music
or THEA 2305 Introduction to Theatre and Dance
ENGL 2337 World Literature
or ENGL 2338 World Literature Themes,
or PHIL 2320 Ethics and Society
CHEM 3340 Introduction to Inorganic Chemistry
Second Language (6 hours)

Senior Year (30 hours)
CHEM 4190 Chemistry Seminar
Social Sciences Core Courses (6 hours)
Upper-level Chemistry Elective (3 hours)
Upper-level Electives (20 hours)

Courses in Chemistry (CHEM)
CHEM 1100 Special Topics in the Laboratory for Transfer Students
Prerequisite: Grade of C or greater from another university in a class with lecture equivalent to CHEM 1400, CHEM 1401, CHEM 1402, or CHEM 1403. Intended for transient and transfer students who passed a lecture class without the accompanying laboratory. One three-hour laboratory session per week. One credit hour.

CHEM 1300 Preparation for General Chemistry
Prerequisite or corequisite: MATH 1302. The class prepares students to take the placement examination required to enroll in CHEM 1402. The class is for students who need to sharpen mathematical, problem-solving, and critical thinking skills while developing chemical knowledge. There will be frequent and comprehensive assessments of learning. The class cannot be combined with CHEM 1100 to satisfy four hours of the laboratory science requirement in the core curriculum. Three hour-long lectures per week. Three credit hours.

CHEM 1305 Science Skills
Prerequisite: Permission of the instructor. This course will help biology, chemistry, and earth science students reach their educational objectives. Interactive instructional methods promote the development of skills that lead to success in college and a successful career in science. Students I) identify and use appropriate campus resources, 2) master common computer programs, 3) learn graphing and statistical methods, 4) develop better strategies to manage money, time, and stress wisely, and 5) explore the research conducted by UALR science faculty. Grading is based on projects, attendance, and participation. This course cannot be used for credit toward a biology, chemistry, or earth science major or minor. Three credit hours.

CHEM 1400 Fundamental Chemistry I
Prerequisite: MATH 1302 with a grade of C or greater. The first in a two-course sequence designed to introduce students in the health related professions (nursing, dental hygiene, physical therapy, respiratory therapy…) to nomenclature, stoichiometry, measurement, periodicity, molecular structure, states of matter, energy, nuclear chemistry and redox and acid/base equilibria. Completing the two-course sequence qualifies students to enroll in CHEM 2450 but no other chemistry classes. This class meets ACTS criteria. Three hour long lectures and one three-hour long laboratory session per week. Four credit hours.

CHEM 1401 Fundamental Chemistry II
Prerequisite: CHEM 1400 with a grade of C or greater. The class continues to build upon the knowledge foundation in chemistry and introduces organic nomenclature, functional group reactions, properties of carbohydrates, lipids, proteins, nucleic acids, and enzymes and principles of metabolism. Completing the course qualifies students to enroll in CHEM 2450 but no other chemistry classes. This class meets ACTS criteria. Three hour long lectures and one three-hour long laboratory session per week. Four credit hours.

CHEM 1402 General Chemistry I
Prerequisite: MATH 1302 or higher level class, with a grade of C or greater. Students must also attain the minimum score on a placement examination to qualify for enrollment in CHEM 1402. Students who do not attain the minimum score may enroll in CHEM 1300. Finishing CHEM 1300 does not substitute for meeting the minimum score on the placement examination. The class builds upon a knowledge foundation in chemistry and offers inquiry into topics of scientific measurement, chemical nomenclature, expressing qualitative and quantitative statements about chemical reactions, qualitative atomic theory, electronic and molecular structure models, chemical periodicity, thermochemistry, gases, kinetic molecular theory, and nuclear chemistry. The class is designed for chemistry majors and others needing rigorous instruction. It meets ACTS criteria. Three hour-long lectures and one three-hour laboratory session per week. Four credit hours.
CHEM 1403 General Chemistry II
Prerequisite: CHEM 1402 with a grade of C or greater. The class continues to build upon the knowledge foundation in chemistry and offers inquiry into topics of chemical equilibrium including acids and bases and sparingly soluble salts, thermodynamics, kinetics, electrochemistry, and coordination compounds. It meets ACTS criteria. Three hour-long lectures and one three-hour laboratory session per week. Four credit hours.

CHEM 1406 General Chemistry for Engineers
This course is designed for Engineering Students. This one semester chemistry course will give engineering students key concepts and principles in chemistry needed for their basic background knowledge. This course is presented using engineering relevant examples and stresses applications in engineering and technology. Note: Course Requirements. Consent of Instructor is required. This course has a prerequisite of 70 or higher score on a department placement test. Students who do not attain the minimum score may enroll in CHEM 1300. MATH 1311 Applied Calculus I, or MATH 1342 Business Calculus, or MATH 1451 Calculus I are prerequisite concurrent. Students completing 1406 and chemistry may substitute CHEM 1406 for CHEM 1402. Students may not receive credit for both 1402 and 1403 by completing 1406. Three hour-long lectures and one-three hour laboratory session per week. Four credit hours.

CHEM 1409 Chemistry and Society
The class develops a base of chemical knowledge for students to consider the impact chemistry has on the world while meeting the goals of the University’s core curriculum competencies in critical thinking, ethical and moral consciousness, historical consciousness, mathematics, and philosophy and methods of science. Material will address topics starting with the atomic and molecular foundations of chemistry to applying principles of scientific modeling to topics such as the environment, medicine and public policy. The class satisfies four hours of the University’s laboratory science curriculum requirement and meets ACTS criteria. Three hour-long lectures and one three-hour laboratory session per week. Four credit hours.

CHEM 2310 Analytical Chemistry I
Prerequisite: CHEM 1403 with a grade of C or greater. The class investigates aqueous equilibrium systems including acid/base, complex species, solubility, and oxidation/reduction, statistical analysis of chemical data, classic titrimetric and gravimetric analysis, and laboratory report writing. Two hour-long lectures and one three-hour laboratory session per week. Three credit hours.

CHEM 2311 Analytical Chemistry II
Prerequisite: CHEM 2310 with a grade of C or greater. The class studies modern instrumental analysis and separation of chemical systems, to include electrochemical, spectroscopic and chromatographic methods. Two hours-long lectures and one three-hour laboratory session per week. Three credit hours.

CHEM 2450 Organic Survey
Prerequisite: CHEM 1401 or CHEM 1403 with a grade of C or greater. The class is appropriate for students needing a one-semester overview of organic chemistry. Topics include nomenclature, classification, synthetic pathways, and spectroscopy. Three hour-long lectures and one three-hour laboratory session per week. Four credit hours.

CHEM 3150 Organic Chemistry Laboratory I
Prerequisite or corequisite: CHEM 3350 with a grade of C or greater. Organic compounds will be prepared and identified. Techniques include determining melting and boiling points, simple fractional and steam distillation, re-crystallization, and extraction. One three-hour-long laboratory per week. One credit hour.

CHEM 3151 Organic Chemistry Laboratory II
Prerequisites or corequisites: CHEM 3351 and CHEM 3150 with grades of C or greater. This class continues to build the knowledge base of organic chemistry laboratory skills by introducing more advanced synthetic methodologies and characterization techniques including IR, NMR, MS and GC. BS chemistry majors should not enroll in this laboratory but in CHEM 3250. One three-hour-long laboratory per week. One credit hour.

CHEM 3170 Physical Chemistry Laboratory I
Prerequisites or corequisites: PHYS 2122, CHEM 3370 with a grade of C or greater. An introduction to multivariate statistical methods and error analysis. Experiments include synthesis of compounds, measurement of physical and electrochemical properties, determination of heats of reaction and reaction rates, and superconductivity studies. Laboratory three hours per week. One credit hour.

CHEM 3171 Physical Chemistry Laboratory II
Prerequisites: CHEM 2311, 3170, 3370 with a grade of C or greater. Prerequisites or corequisites: CHEM 3371. Synthesis of inorganic compounds together with measurement of quantum mechanical spectroscopic properties, magnetic susceptibility, and properties of macromolecules. Laboratory three hours. One credit hour.

CHEM 3250 Qualitative Organic Analysis Laboratory
Prerequisite: CHEM 3350 and CHEM 3150 with grades of C or greater; Prerequisites or corequisites: CHEM 3351 with a grade of C or greater. The class continues to build the knowledge base of organic chemistry laboratory techniques by requiring complex analytical problem solving ability along with advanced laboratory skills. Students receive unknown organic compounds and identify them by preparing and characterizing derivatives using IR, NMR, MS, and CG. BS chemistry majors should take this laboratory instead of CHEM 3151. Two three-hour-long laboratories per week. Two credit hours.

CHEM 3340 Introduction to Inorganic Chemistry
Prerequisite: CHEM 2450 or 3350 with a grade of C or greater. A study of inorganic chemistry with emphasis on chemical bonding theories (both covalent and ionic molecules), periodic properties with isolation and synthesis associated with few main group elements, acid/base concepts, introduction to transition metals, coordination complexes (name, structures, isomers, chelate effects). Required for BA and BS majors. Lecture three hours per week. Three credit hours.

CHEM 3350 General Organic Chemistry I
Prerequisite: CHEM 1403 with a grade of C or greater. The first in a two-course sequence designed to introduce science students to organic compounds. Topics include nomenclature, alkanes, alkenes, alkynes, halides, alcohols, ethers, functional groups, stereochemistry, acid-base concepts, introduction to transition metals, coordination complexes (name, structures, isomers, chelate effects). Required for BA and BS majors. Lecture three hours per week. Three credit hours.

CHEM 3351 General Organic Chemistry II
Prerequisite: CHEM 3350 with a grade of C or greater. The class continues to build the knowledge base of organic chemistry by adding conjugated systems, aromatic compounds, carboxyl compounds, carboxylic acids and derivatives, amines, phenols, aryl halides, spectroscopy and data interpretation. Three hour-long lectures. Three credit hours.

CHEM 3370 Physical Chemistry: Thermodynamics and Kinetics
Prerequisites: CHEM 2311 with a grade of C or greater. Prerequisites or corequisites: MATH 1452, PHYS 2322. An introduction to theoretical chemistry to include the study of gases and condensed phases, phase changes, solutions, chemical reactions, and reaction rates. Lecture three hours per week. Three credit hours.

CHEM 3371 Physical Chemistry: Quantum and Statistical Mechanics
Prerequisites: CHEM 2311 with a grade of C or greater. Prerequisites or corequisites: MATH 2453, PHYS 2322. An introduction to theoretical chemistry to include the study of quantum and statistical mechanics of atomic and molecular systems. Lecture three hours per week. Three credit hours.

CHEM 3372 Physical Chemistry for the Life Sciences
Prerequisites: CHEM 2311, MATH 1451, PHYS 1322 and 1122 with a grade of C or greater. An introduction to theoretical chemistry, with emphasis on the application of physical laws to biochemical systems, such as purified proteins and nucleic acids. Topics include spectroscopic techniques, thermodynamics, and kinetics. Lecture three hours, recitation one hour, and laboratory three hours per week. Five credit hours.
CHEM 4190 Chemistry Seminar
Presentation of papers, discussion, analysis, and implications of experimental investigations in the natural sciences. Seminar serves as the capstone course for assessment. Required of senior chemistry majors in their final semester before graduation. One hour per week. One credit hour.

CHEM 4251 Organic Preparation
Prerequisite: CHEM 3151 or 3250 with a grade of C or greater. Advanced experiments in organic chemistry employing special apparatus and techniques. Dual-listed in the UALR Graduate Catalog as CHEM 5251. Two three-hour laboratories per week. Two credit hours.

CHEM 4330 History of Chemistry
Prerequisite: CHEM 3350 with a grade of C or greater. This course is a survey of the growth and development of chemistry. Lectures will stress connections of modern chemistry to past chemists/scientists and how ideas are passed from generation to generation. The personality and human side of the scientists will be emphasized along with the interactions between science and society. Dual-listed in the UALR Graduate Catalog as CHEM 5330. Students who have completed CHEM 4330 may not enroll in CHEM 5330. Three credit hours.

CHEM 4340 Inorganic Chemistry
Prerequisites: CHEM 3340, 3371 with a grade of C or greater (the latter may be taken as a corequisite). A theoretical treatment of inorganic chemistry to include atomic structure, valence bond, molecular orbital and ligand field theories; the crystalline state; thermodynamic and kinetic aspects of transition metal chemistry. Laboratory will reinforce concepts developed in lecture. Required for the BS major. Dual-listed in the UALR Graduate Catalog as CHEM 5340. Lecture two hours and laboratory three hours per week. Three credit hours.

CHEM 4342 Environmental Chemistry
Prerequisites: CHEM 3350 and CHEM 2310 with a grade of C or greater. A survey of environmental chemistry. Topics covered will include: Composition of the atmosphere and behavior; energy and climate; principles of photochemistry and atmospheric chemistry; petroleum and coal chemistry and associated environmental problems; chemistries of soaps and surfactants; haloorganics and pesticides, water and air pollution (tropospheric and stratospheric) and connections to climate change; elemental and molecular environmental chemistry in geological media; water cycle and water treatment; principles of nuclear chemistry and radiochemistry; nuclear environmental chemistry; and evaluation of energy sources that are sustainable. Dual-listed in the UALR Graduate Catalog as CHEM 5342. Students who have completed CHEM 4342 may not enroll in CHEM 5342. Lecture three hours a week. Three credit hours.

CHEM 4350 Intermediate Organic Chemistry
Prerequisite: CHEM 3351 with a grade of C or greater. An elective course designed for students with special interests in organic chemistry who wish exposure to additional concepts beyond those covered in CHEM 3350, 3351. Dual-listed in the UALR Graduate Catalog as CHEM 5350. Lecture three hours per week. Three credit hours.

CHEM 4360 Medicinal Chemistry
Prerequisites: CHEM 3351; and CHEM 3150 and CHEM 3151, or CHEM 3250; all with grades of C or greater. This course will serve as an introduction to the chemistry and theory of drug action that includes general drug design, drug-receptor interactions, drug design through enzyme inhibition, pharmacokinetics, and drug metabolism. Additionally the mechanism of specific drug classes will be examined. This course cannot be used as a substitute for the biochemistry requirement of the ACS certified degree. Dual-listed in the UALR Graduate Catalog as CHEM 5360. Lecture three hours per week. Three credit hours.

CHEM 4380 Introduction to Polymer Chemistry
Prerequisite: CHEM 3351, 3151 or 3250 with a grade of C or greater. Other courses recommended but not required are CHEM 3370, 3371, 3170, 3171, and 3572. Theoretical and practical aspects of polymer chemistry will be coordinated. Topics include history, types of polymerizations, kinetics, molecular weight, physical properties including thermal and spectroscopic characterization, biopolymers and engineering resins. Dual-listed in the UALR Graduate Catalog as CHEM 5380. Lecture two hours, laboratory three hours. Three credit hours.

CHEM 4399 Special Topics in Chemistry
Prerequisite: consent of instructor. A course for students interested in acquiring additional knowledge in selected topics in chemistry. Possible subjects include: chemical carcinogenesis, environmental chemistry, solid state chemistry, radiochemistry, macromolecules, surface chemistry, quantum chemistry, or others. Dual-listed in the UALR Graduate Catalog as CHEM 5399. Lecture three hours per week. Three credit hours.

CHEM 4410, 4200, 4300, 4400 Independent Study
Prerequisites: junior or senior standing, consent of the chairperson. Designed for students who want to carry out special investigations, which could include chemical education research or directed study of a specialized chemical topic of interest to the student. Topic and method of procedure must have approval of the supervising faculty member. Frequent conferences with the instructor and a study of chemical literature with a final written report are required. The student is expected to spend four to six hours per week on the project for each hour of credit earned. The exact hourly commitment per week will depend on the nature of the project and will be agreed on in advance by the student and the instructor. One, two, three, or four credit hours.

CHEM 4411 Instrumental Analysis
Prerequisites: CHEM 2311, 3350; PHYS 2322, 2122 or 1322, 1122 with consent of instructor with a grade of C or greater. A study of the most common modern instrumental methods of analysis, to include topics in spectroscopy, electrochemistry, and chromatography. Dual-listed in the UALR Graduate Catalog as CHEM 5411. Lecture three hours, one-four-hour laboratory per week. Four credit hours.

CHEM 4420 Biochemistry
Prerequisites: CHEM 2310, 3151, 3351 with a grade of C or greater. A basic course covering the chemistry and metabolism of proteins, lipids, carbohydrates, and nucleic acids, and the action of vitamins, hormones, and enzymes. Dual-listed in the UALR Graduate Catalog as CHEM 5420. Lecture three hours, laboratory three hours. Four credit hours.

CHEM 4431 Biochemistry II
Prerequisites: CHEM 4420 or 5420 with a grade of C or greater. Continuation of Biochemistry I, covering energy generation, metabolism of lipids and amino acids, integration of metabolism, DNA replication and repair, transcription, translation, and control of gene expression. Dual-listed in the UALR Graduate Catalog as CHEM 5321. Students who have completed CHEM 432 may not enroll in CHEM 5321. Lecture three hours per week. Three credit hours.

CHEM 4289, 4389, 4489 Undergraduate Research
Prerequisites: consent of department chairperson, junior or senior standing, compliance with approved guidelines (available from chairperson) and comments in the printed schedule. Trains the student to analyze, plan, and conduct experimental work on a chemical problem. Frequent conferences and a study of chemical literature with a final written report are required. The student is expected to spend four to six hours per week on the project for each hour of credit earned. The exact hourly commitment per week will depend on the nature of the project and will be agreed on in advance by the student and the instructor. Two, three, or four credit hours.
Chairperson:
Connelly, Jeffrey B., Professor

Professor:
Ledbetter, Michael T.

Associate Professor:
McMillan, Margaret E.

Assistant Professor:
DeAngelis, Michael T.  
Ruhl, Laura S.

Instructor:
Shroat-Lewis, René A.  
Sims, W. Jay

The Earth Sciences include the disciplines of geology, meteorology, oceanography, Geographic Information Systems (GIS), and the application of these disciplines in the environmental sciences. The department’s goals are to relate these disciplines to intelligent living with the earth and to understand the interplay between earth and humanity. Students are encouraged to obtain a scientific understanding of earth systems on a global scale.

The Earth Sciences provide career opportunities for employment in industry, government, and teaching. Students interested in this area of study are urged to consult the departmental faculty regarding curricular plans and career goals. The department offers a bachelor of science in geology, a minor in geology, and a curriculum leading to secondary teacher licensure in science education.

The department offers course work at two levels:

1. University core curriculum requirement: ERSC 1302/1102 and 1303/1103 meet the science laboratory course requirement, and
2. ERSC 2300 meets the social sciences course requirement.

General Information

Professional courses, numbered 3310 and above, are designed for geology majors and minors, engineering technology majors, students interested in science teaching, and for other students with deeper interest in the field. For example, ERSC 3360 and 4353 are of interest to biology students; ERSC 3372, 4322, 4323, 4421, and 4373 are recommended for all students in environmental fields; and ERSC 4371 is appropriate for students in engineering technology or construction management.

For freshmen and sophomores who are interested or think they may be interested in teaching, please see the UALRTeach website (http://ualr.edu/ualrteach/) for more information about the UALRTeach program.

Laboratory Science Requirement Courses

The core curriculum requirements for science laboratory courses may be met by ERSC 1302/1102 Physical Geology lecture and laboratory and ERSC 1303/1103 Historical Geology lecture and laboratory.

Secondary Teacher Licensure in Science Education

A program leading to initial licensure by the Arkansas Department of Education in the area of secondary education is available to students at UALR. See “Secondary Teacher Licensure” for a description of the requirements. Because completing all the components of the secondary education program in four years requires careful planning, students should see the department chair of their chosen major for advising as early as possible after acceptance to UALR.

Bachelor of Science in Geology (124 hours)

<table>
<thead>
<tr>
<th>Freshman Year (28 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1402 General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1403 General Chemistry II</td>
</tr>
<tr>
<td>ERSC 1302 Physical Geology</td>
</tr>
<tr>
<td>and ERSC 1102 Physical Geology Laboratory</td>
</tr>
<tr>
<td>ERSC 1303 Historical Geology</td>
</tr>
<tr>
<td>and ERSC 1103 Historical Geology Laboratory</td>
</tr>
<tr>
<td>RHET 1311 Composition I</td>
</tr>
<tr>
<td>RHET 1312 Composition II</td>
</tr>
<tr>
<td>MATH 1451 Calculus I</td>
</tr>
<tr>
<td>Sophomore Year (29 hours)</td>
</tr>
<tr>
<td>ERSC 3310 Earth Materials</td>
</tr>
<tr>
<td>ERSC 3320 Field Geology I</td>
</tr>
<tr>
<td>ARHA 2305 Introduction to Visual Art,</td>
</tr>
<tr>
<td>MUHL 2305 Introduction to Music,</td>
</tr>
<tr>
<td>or THEA 2305 Introduction to Theatre and Dance (3 hours)</td>
</tr>
<tr>
<td>MATH 1452 Calculus II or STAT 2350 Intro. to Statistics</td>
</tr>
<tr>
<td>Physics (4 hours)</td>
</tr>
<tr>
<td>HIST 1311 History of Civilization I</td>
</tr>
<tr>
<td>HIST 1312 History of Civilization II</td>
</tr>
<tr>
<td>ENGL 2337 World Literature,</td>
</tr>
<tr>
<td>ENGL 2338 World Literature Themes,</td>
</tr>
<tr>
<td>or PHIL 2320 Ethics and Society</td>
</tr>
<tr>
<td>SPCH 1300 Speech Communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year (30 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics (4 hours)</td>
</tr>
<tr>
<td>ERSC 3430 Structural Geology</td>
</tr>
<tr>
<td>ERSC 4340 Stratigraphy</td>
</tr>
<tr>
<td>ERSC 4411 Igneous and Metamorphic Petrology</td>
</tr>
<tr>
<td>Elective (3 hours)</td>
</tr>
<tr>
<td>ARHA 2305 Introduction to Visual Art,</td>
</tr>
<tr>
<td>MUHL 2305 Introduction to Music,</td>
</tr>
<tr>
<td>or THEA 2305 Introduction to Theatre and Dance not taken above (3 hours)</td>
</tr>
<tr>
<td>HIST 2311 U.S. History to 1877,</td>
</tr>
<tr>
<td>HIST 2312 U.S. History since 1877,</td>
</tr>
<tr>
<td>or POLS 1310 American National Government</td>
</tr>
<tr>
<td>Social science core requirements (3 hours)</td>
</tr>
<tr>
<td>Courses in minor (6 hours)</td>
</tr>
<tr>
<td>Summer (6 hours)</td>
</tr>
<tr>
<td>ERSC 4320 Field Geology II</td>
</tr>
<tr>
<td>or equivalent three to six hours of field geology</td>
</tr>
<tr>
<td>Senior Year (31 hours)</td>
</tr>
<tr>
<td>ERSC 3440 Sedimentology</td>
</tr>
<tr>
<td>ERSC 4190 Senior Seminar</td>
</tr>
<tr>
<td>ERSC Upper-Level Elective (3 hours)</td>
</tr>
<tr>
<td>Courses in Minor (6 hours)</td>
</tr>
<tr>
<td>Social Science Core Requirement (3 hours)</td>
</tr>
<tr>
<td>Electives (15 hours)</td>
</tr>
</tbody>
</table>
## Major in Geology

**Major courses (39 hours)**
- ERSC 1302 Physical Geology
  - and ERSC 1102 Physical Geology Laboratory
- ERSC 1303 Historical Geology
  - and ERSC 1103 Historical Geology Laboratory
- ERSC 3310 Earth Materials
- ERSC 3320 Field Geology I
- ERSC 4340 Stratigraphy
- ERSC 4411 Igneous and Metamorphic Petrology
- ERSC 3440 Sedimentology
- ERSC 3430 Structural Geology
- ERSC 4190 Senior Seminar
- ERSC 4320 Field Geology II

6 hours of ERSC electives

**Supporting courses (23 hours)**
- CHEM 1402 General Chemistry I
- CHEM 1403 General Chemistry II
- PHYS 1321 Elementary Physics I and PHYS 1121 Elementary Physics I Laboratory
  - with PHYS 1322 Elementary Physics II
  - and PHYS 1122 Elementary Physics II Laboratory
- or PHYS 2321 Physics for Scientists and Engineers I
  - and PHYS 2121 Physics for Scientists and Engineers I Laboratory
  - with PHYS 2322 Physics for Scientists and Engineers II
  - and PHYS 2122 Physics for Scientists and Engineers II Laboratory
- MATH 1451 Calculus I
- MATH 1452 Calculus II
- or STAT 2350 Introduction to Statistical Methods

### Minor in Geology

**Required Courses (8 hours)**
- ERSC 1302 Physical Geology
  - and ERSC 1102 Physical Geology Laboratory
- ERSC 1303 Historical Geology
  - and ERSC 1103 Historical Geology Laboratory
- 12 hours of ERSC electives

### Minor in Environmental Geology

**Required Courses (12 hours)**
- ERSC 1302 Physical Geology
  - and ERSC 1102 Physical Geology Laboratory
- ERSC 1303 Historical Geology
  - and ERSC 1103 Historical Geology Laboratory
- ERSC 4421 Introduction to Geographic Information Systems

8 hours from the following:
- ERSC 4373 Hydrogeology
- ERSC 4419 Geomorphology
- ERSC 4422 Applied GIS
- ERSC 4322 Environmental Geology
- ERSC 4371 Engineering Geology
- ERSC 3380 Oceanography
- ERSC 3390 Weather Studies
- ERSC 4195, 4295, 4395 Internship in Earth Science
- ERSC 4199, 4299, 4399, 4499 Special Topics (must be approved)

### Courses in Earth Sciences (ERSC)

#### ERSC 1102 Physical Geology Laboratory
Prerequisite or corequisite: ERSC 1302. A laboratory course designed to accompany ERSC 1302. Students observe, gather and manipulate data, interpret data, and make field measurements using minerals, rocks, graphs, and maps. The laboratory meets for two hours per week. One credit hour.

#### ERSC 1103 Historical Geology Laboratory
Prerequisite or corequisite: ERSC 1303. A laboratory course designed to accompany ERSC 1303. Students are involved with geologic data gathering, manipulation, and interpretation along with field measurements and problem solving. Two hours laboratory per week. One credit hour.

#### ERSC 1302 Physical Geology
An introduction to the science of geology, the geological view of the human environment, how geologists learn about Planet Earth, and how society and geology interact. Active learning applied to natural processes shaping the earth's surface, producing the solid and fluid earth, and historical development of geological paradigms. Three hours lecture per week. Three credit hours.
ERSC 1303 Historical Geology
An introduction to the science of geology, how geologists have learned about the Earth using geologic time as a theme. Active learning applied to various measurements of time, the documentation of evolutionary changes presented by the geologic record, and the development of geologic paradigms used in interpreting this record. Three hours lecture per week. Three credit hours.

ERSC 1305 Science Skills
Prerequisite: Permission of the instructor. This course will help biology, chemistry, and earth science students reach their educational objectives. Interactive instructional methods promote the development of skills that lead to success in college and a successful career in science. Students 1) identify and use appropriate campus resources, 2) master common computer programs, 3) learn graphing and statistical methods, 4) develop better strategies to manage money, time, and stress wisely, and 5) explore the research conducted by UALR science faculty. Grading is based on projects, attendance, and participation. This course cannot be used for credit toward a biology, chemistry, or earth science major or minor. Three credit hours.

ERSC 2300 Science and Technology in Society
Recommended prerequisite: RHET 1311. Introduction to how society is impacted by and responds to science-driven decision-making. Examines how society embraces and applies (including governmental institutions) scientific principles and technological advances to solving global societal problems such as sustainability of natural resources, development of new energy resources due to population and economic growth, changes in climate and weather, pollution, and human health issues. Case studies will examine societal response (particularly governmental) to both past and current global scientific and technological issues.

ERSC 3310 Earth Materials
Prerequisites: ERSC 1302, ERSC 1102. Co-requisite: CHEM 1402 or consent of instructor. Introduction to mineralogy including the silicate and nonsilicate groups, their crystalline structure, occurrence and origins. Introduction to the three major rock types and economic uses of minerals and rocks. Two hours lecture, three hours laboratory per week. Three credit hours.

ERSC 3320 Field Geology I
Prerequisites: ERSC 1302, ERSC 1102, ERSC 1303, ERSC 1103. Introduction to geologic field methods. Topics include: outcrop description; map and aerial photo interpretation; navigation skills; stratigraphic section measurement; cross-section construction; GPS and GIS techniques; computer drafting techniques; and geologic mapping in the Ouachita Mountains. Two hours lecture, three hours laboratory per week. Three credit hours.

ERSC 3360 Paleobiology
Prerequisites: ERSC 1303/1103, or BIOL 1401, or consent of instructor; ERSC 2320 recommended. The evolution and ecological structure of the biosphere from the origin of life to the present emphasizing the evolution and paleobiology of animal life as shown by the fossil record. Lectures discuss the methods used to interpret the fossil record, and cover topics such as ontogeny, speciation, phylogeny and systematics, functional anatomy, biogeography, biostratigraphy, paleoecology, and macroevolution. Laboratories will focus on paleobiological principles that can be demonstrated by the major groups of invertebrates that are common in the geologic record. Two hours lecture, three hours laboratory per week; one 1-2 day field trip. Three credit hours.

ERSC 3372 Surficial Hydrology
Prerequisites: MATH 1304 or 1311 and consent of instructor; junior standing in earth science, physics, chemistry, biology, environmental health science, or engineering technology. Hydrologic cycle, basin analysis, runoff analysis, stream hydraulics, flooding, case histories, field methods in hydrology, hydrologic planning. Three hours lecture per week. Three credit hours.

ERSC 3380 Oceanography
Prerequisite: 4 hours of earth science, biology, chemistry, or physics. This course provides an introduction to the historical, physical, chemical, geological, and biological aspects of the oceans and their importance to the global system. Three hours lecture per week. Three credit hours.

ERSC 3390 Weather Studies
Prerequisite: 4 hours of earth science, biology, chemistry or physics. This course provides an overview of how the distribution of heat, atmospheric circulation, humidity, and air pressure forms local, regional and global weather conditions. The course will include analysis of recent meteorological events that demonstrate basic principles of how weather patterns evolve. May not be counted for BS in Geology. Three hours lecture per week. Three credit hours.

ERSC 3430 Structural Geology
Prerequisites: ERSC 3310, MATH 1303. The description and analysis of geological structures in Earth’s crust and an introduction to global tectonics. Topics covered include: the description of geological structures; stress, strain, deformation and rheology; the kinematics and dynamics of folding and faulting; microstructural analysis; principles of plate tectonics; selected orogenic systems of the world. Three hours lecture, two hours laboratory per week. Four credit hours.

ERSC 3440 Sedimentology
Prerequisite: ERSC 1302/1102. Sedimentary processes and products; siliciclastic sediments and environments, biogenic, chemical and other nonsiliciclastic sedimentary rocks and the environments in which the form. Sedimentary petrology methods. Two hours lecture, 4 hours lab per week. Weekend field trips. Four credit hours.

ERSC 4100, 4200, 4300 Independent Problems
Prerequisite: consent of instructor, generally given only with senior standing and/or 20 hours of geology. Field or laboratory problem in consultation with instructor. One, two, or three hours or equivalent per week. One, two, or three credit hours.

ERSC 4190 Senior Seminar
Prerequisite: senior standing and geology major or minor. Students initiate and conduct independent research. Students work with faculty advisor and produce written and oral progress reports throughout the semester culminating in a professional presentation at the end of the semester. Students must contact faculty advisor and discuss their research topic the semester prior to enrollment in this course. Course includes compilation of academic portfolio. One hour per week. One credit hour.

ERSC 4304 Geology of North America
Prerequisites: ERSC 1303/1103, 3360. Detailed history of North America and its life forms as interpreted from rock and fossil records. Principles of interpretation, geologic and biologic succession of events, and advanced individual interpretation of geologic maps, with reports. Two hours lecture, two hours laboratory (or equivalent) per week. Three credit hours.

ERSC 4320 Field Geology II or approved Geology Field Camp
Prerequisites: ERSC 3320 and ERSC 3430. Advanced geologic mapping techniques. Three weeks of field work and instruction at various locations in the United States. Three credit hours. Requires 8 hours in the field every day for three weeks. Additional fee for transportation, food and other field costs. Three credit hours.

ERSC 4322 Environmental Geology
Prerequisite: consent of instructor based on completion of ERSC 1302/1102, GEOG 1311, or the equivalent. Humans as a geologic agents, geologic hazards in the environment, geology and land use studies, urban geology, and case histories. Dual-listed as ERSC 5322. Three hours lecture per week. Three credit hours.
ERSC 4323 Geology of Arkansas
Prerequisites: ERSC 1302/1102, consent of instructor. Regional geomorphology, structure, stratigraphy, and paleontology of Arkansas. Includes field trips to Ozark dome, Ouachita fold belt, Arkansas Valley, and Mississippi Embayment/Gulf Coastal Plain. Dual-listed as ERSC 5323. Three hours lecture per week, weekend field trips. Three credit hours.

ERSC 4340 Stratigraphy
Prerequisite: ERSC 3440. Course will describe and interpret the governing stratigraphic principals and methods of correlation of sedimentary rocks. The role of sedimentary environments, climate and tectonics on sedimentation patterns will be examined. Three hours lecture per week.

ERSC 4353 Geology and Ecology of Bahamas
Prerequisites: Eight hours of core science and consent of instructor. This course explores the geology and ecology of the shallow-water marine environment by examining the preeminent modern example, the Bahamas platform. The Bahamas provide an excellent model for understanding modern and ancient carbonate and reef deposits, and variety of terrestrial/aquatic habitats. Biological processes are ultimately responsible for many of the geological features of the Bahamas, so the course considers the biology/ecology of marine organisms in addition to geological topics. The field component is based at the Gerace Field Center for Geological, Biological, and Anthropological Research on San Salvador Island, Bahamas. Seventy-five hours of lecture/laboratory/field activity. Dual-listed as ERSC 5353. Three credit hours.

ERSC 4371 Engineering Geology
Prerequisite: MATH 1303 or higher or the consent of instructor. The study of the interaction of rock, soil and geologic processes with the engineering activities of man by applying geological data, techniques and principles. The integration of geological, geotechnical and geophysical investigative methods will be emphasized. Lecture topics will include soil and rock mechanics and rock deformation, the assessment of the spatial-temporal variability of sub surface materials, slope stability analysis and slope failure mitigation, earthquake engineering, hydrologic system management, and the application of GIS and geology. Dual-listed as ERSC 5371. Two hours lecture, two hours laboratory per week. Three credit hours.

ERSC 4373 Hydrogeology
Prerequisites: MATH 1302 or MATH 1311; ERSC 3310. Co-require: CHEM 1402. Ground water occurrence, flow, porosity, permeability, aquifer analysis, geology of ground water, water well logging, well development, case histories, field methods, hydrogeologic planning. Dual-listed in the UALR Graduate Catalog as ERSC 5373. Three hours lecture per week. Three credit hours.

ERSC 4389 Undergraduate Research
Prerequisite: senior honors standing in geology. Various topics for thorough research selected by students in consultation with an advisor. Field work and/or experimental or laboratory work resulting in a report to be critiqued by at least two faculty members (no oral defense). The student is expected to spend at least nine hours per week on the project. The exact hourly commitment per week will depend on the nature of the project and will be agreed on in advance by the student and the instructor. Three credit hours.

ERSC 4391 Cooperative Education in Earth Science
Prerequisites: Junior undergraduate standing or graduate standing and consent and approval of assignment by advisor. Supervised professional experience related to students discipline with governmental agencies, industry and consulting firms. This course requires a minimum of 200 semester work hours. Three credit hours.

ERSC 4195, 4295, 4395 Internship in Earth Science
Prerequisites: senior standing in geology, consent and approval of assignment by advisor. Supervised professional experience related to students discipline with governmental agencies, industry, and consulting firms. Forty hours supervised work per credit hour. One, two, or three credit hours.

ERSC 4411 Igneous and Metamorphic Petrology
Prerequisite or corequisite: ERSC 3310. Composition, characteristics, classification, occurrence, and petrogenesis of the igneous and metamorphic rocks. Megascopic and microscopic methods of description. Two hours lecture, four hours laboratory per week. Four credit hours.

ERSC 4419 Geomorphology
Prerequisites: ERSC 1302, ERSC 1102, ERSC 3320, or consent of instructor. The study of form and process at the Earth’s surface. The interactions between erosional and depositional processes at the Earth’s surface with tectonic processes operating within the Earth are examined with respect to landform evolution. Laboratory includes the analysis of maps, digital imagery, and field applications of GPS/GIS technology. Dual-listed in the UALR Graduate Catalog as ERSC 5419. Two hours lecture, four hours laboratory or field study per week. Four credit hours.

ERSC 4421 Introduction to Geographic Information Systems (GIS)
Prerequisites: consent of instructor. This course introduces Geographic Information Systems (GIS) and the use of spatial data for problem-solving in science. The lecture portion of the course focuses on the data models used to represent spatial features and on the processes involved in creating, acquiring, analyzing, and displaying georeferenced information. The laboratory portion of the course employs a project-based methodology including applications from geology, biology, environmental science, and political science to foster basic GIS software proficiency. Dual-listed as ERSC 5421. Two hours lecture per week, four laboratory hours. Four credit hours.

ERSC 4422 Applied GIS
Prerequisites: BIOL/ERSC 4421 or consent of instructor. This course builds on the fundamental concepts of Geographic Information Systems (GIS) from ERSC 4421 Introduction to GIS. It focuses on advanced applications in GIS with an emphasis on problem-solving, advanced analysis techniques, and database management. Two lecture hours per week, four laboratory hours. Four credit hours.

ERSC 4426 Introduction to Remote Sensing
Prerequisites: ERSC/BIOL 4421 or consent of instructor. This course introduces the fundamentals of manipulating and interpreting the electromagnetic spectrum. The lecture portion of the class covers concepts of remote sensing, including how data is collected, processed, analyzed, and interpreted. The lab portion of the class is focused on building proficiency in several images processing software programs and the use of spatial data for problem-solving in science. Two lecture hours per week, four laboratory hours. Four credit hours.

ERSC 4199, 4299, 4399, 4499 Special Topics
Prerequisite: consent of instructor. Advanced and specialized topics in the geological sciences, especially those of current interest. Refer to semester schedule for special topic offered. Credit will vary depending upon course topic. One, two, three, or four hours or equivalent per week. One, two, three, or four credit hours.
Overview of Health, Human Performance and Sport Management Degrees:
The Department of Health, Human Performance and Sport Management degree programs are designed to educate students as health professionals in community health agencies, health maintenance organizations, business and industry, wellness programs, and also to prepare students to enter graduate programs. Students may also earn a PK-12 teaching licensure in Physical Education Wellness and Leisure.

The student seeking a Bachelor of Science degree in Health, Human Performance and Sport Management may select from the following emphasis areas:

• Emphasis in Health and Exercise Science in Secondary Education
• Emphasis in Health Education and Promotion: select minor
  • Health Sciences Minors:
  • Minor in Health Sciences
  • Minor in Health and Exercise Science

General Information
Admission Requirements
Students who select health sciences as a major must have completed a minimum of 12 credit hours with a cumulative grade point average of 2.00 or greater.

Bachelor of Science Degree programs in the Department of Health, Human Performance and Sport Management Emphasis areas:

• Emphasis Health & Exercise Science in Secondary Education
The health and exercise science in Secondary Education emphasis prepares students to become licensed teachers in the area of Physical Education, Wellness, and Leisure P-12. Students earning this degree will also complete the courses necessary to obtain a coaching endorsement.

• Emphasis in Health Education and Promotion
This course of study is designed to prepare students as health professionals in community health agencies, health maintenance organizations, as well as business and industry wellness programs. It is also designed to assist the entry-level health educator in taking the National Health Education Credentialing examination. This degree requires a minor course of study.

Core Curriculum (44 hours)
General Health Sciences Concentration Area (21 hours)
Professional Area Requirements (37 hours)
Related Area Requirements (4 hours)
Minor (18 hours)

Secondary Teacher Licensure
The secondary education minor occurs in three sequential blocks. Students interested in this degree should review the minor in secondary education under Secondary Teacher Licensure in this catalog. Please contact the health sciences department at (501) 683-7201 for advising as early as possible to reduce any possible delays in progress toward this degree.
EMPHASIS IN HEALTH AND EXERCISE SCIENCE IN SECONDARY EDUCATION

Core Curriculum (44 hours)
General Health Sciences Concentration Area (8 hours)
  HSCI 3401 Nutrition
  HSCI 3412 Applied Human Sciences
or BIOL 1411 Introduction to Human Anatomy & Physiology I
or BIOL 1412 Introduction to Human Anatomy & Physiology I

Professional Area Requirements (55 hours)
  HSCI 2372 Care & Prevention of Injuries
  HSCI 3210 Individual Sports
  HSCI 3211 Health & Safety of Early Childhood
  HSCI 3212 Teaching Individual Sports II
  HSCI 3220 Teaching Team Sports
  HSCI 3222 Teaching Team Sports II
  HSCI 3302 Exercise Physiology
  HSCI 3310 Coaching Theory and Methodology
  HSCI 3320 History of Physical Education
  HSCI 3330 Teaching PK-5 Physical Education
  HSCI 3372 Advanced First Aid
  HSCI 3377 Drug Education K-12
  HSCI 3401 Nutrition
  HSCI 3410 Biomechanics of Human Movement
  HSCI 3422 Exercise, Wellness, & Lifestyles
  HSCI 3440 Adapted Physical Ed. K-12
  HSCI 4350 Methods & Techniques of Teaching Physical Education 6-12
  HSCI 4379 Methods & Techniques of Teaching HLED
  HSCI 4384 Motor Development

SCED Minor (18 hours)
  Refer to “Secondary Teacher Licensure” in this catalog for more specifics

Praxis exams required:
  Praxis II: # 621 or 623 or 624 Principles of Learning and Teaching (PLT)
  Praxis II: #0095 and 0856 Specialty area

EMPHASIS IN HEALTH EDUCATION AND PROMOTION

This course of study is designed to prepare students as health professionals in community health agencies, health maintenance organizations, as well as business and industry wellness programs. It is also designed to assist the entry-level health educator in taking the National Health Education Credentialing examination. This degree requires a minor course of study.

This degree is offered in either face-to-face or online course delivery modalities. For information concerning our online Bachelor of Sciences emphasis in Health Education and Promotion degree contact: Susan Hook at smhook@ualr.edu or (501) 569-3523.

Core Curriculum (44 hours)
General Health Sciences Concentration Area (21 hours)
  HSCI 1101 Dieting & Weight Control
  or HSCI 1102 Substance Abuse & Addiction
  or HSCI 1103 Smoking Cessation
  or HSCI 1104 Stress Management
  or One hour LESC course
  HSCI 1370 Personal Health
  HSCI 3372 Advanced First Aid
  HSCI 3377 Drug Education K-12
  HSCI 3401 Nutrition
  HSCI 3422 Exercise, Wellness & Lifestyle
  HSCI 4376 Mental Health Education

Professional Area Requirements (37 hours)
  ENHS 4430 Epidemiology: Environment & Health
  HSCI 2303 The Theory and Practice of Health Education
  HSCI 3374 Community Health Agencies
  HSCI 4371 HLED Concepts & Applications
  HSCI 4373 Controversial Issues in HLED
  HSCI 4374 Family Life and Sex Education
  HSCI 4378 Organization & Administration of HLED Programs
  HSCI 4379 Methods & Techniques of Teaching HLED
  HSCI 4380 HLED Program Evaluation
  HSCI 4381 Health Sciences Seminar
  HSCI 4695 Internship in Health Education

Related Area Requirements (4 hours)
  HSCI 3412 Applied Human Science
  or BIOL 1411 Introduction to Human Anatomy & Physiology I
  or BIOL 1412 Introduction to Human Anatomy & Physiology II
  BIOL 2401 Microbiology

Minor (18 hours)

Minor in Health, Human Performance and Sport Management

The minor in Health, Human Performance and Sport Management is designed for students interested in community health education. This minor requires 18 credit hours which should include the following courses:
  HSCI 1370 Personal Health
  HSCI 3401 Nutrition,
  or HSCI 3422 Exercise, Wellness, and Lifestyle,
  or HSCI 3302 Exercise Physiology
  HSCI 3377 Drug Education K-12
  or HSCI 4373 Controversial Issues in Health Education
  HSCI 4374 Family Life and Sex Education
  HSCI 4376 Mental Health Education
  or HSCI 4371 Health Education Concepts and Applications
  HSCI 3374 Community Health Agencies
  or HSCI 4378 Organization and Administration of Health Education Programs

Minor in Health and Exercise Science: 20 hours
  HSCI 3422 Exercise, Wellness, & Lifestyles
  HSCI 3210 Individual Sports
  HSCI 3220 Teaching Team Sports
  12 hours of Upper-Level Health and Exercise Science Courses.
Minor in Sport Management
Sport Management is an interdisciplinary field of study which emphasizes a broad understanding of both sport and business. The Sport Management minor encourages the development of this interdisciplinary knowledge base and provides the students with the practical skills necessary for successful careers in management, promotion, administration, marketing, organizing and leading a sport business or organization. This minor requires 18 credit hours which should include the following courses:

Sport Management Minor Prerequisite Course
(3 credits)
HSCI 2330 – Introduction to Sport Management

Sport Management Minor Required Core Courses
(15 credits)
Select 15 credits (5 courses) from the following list:
HSCI 3330 Governance and Management of Sport Organization
HSCI 3331 Legal and Ethical Issues in the Sport Industry
HSCI 3332 Sport Facility and Event Management
HSCI 3334 Sports Marketing Management
HSCI 3335 Economics and Finance in the Sport Industry
HSCI 4399/5399 Special Topics

Minor in Health and Exercise Science (20 hours)
HSCI 3422 Exercise, Wellness & Lifestyles
HSCI 3210 Individual Sports
HSCI 3220 Teaching Team Sports
12 hours of Upper-Level Health and Exercise Science Courses

Arkansas Coaching Endorsement information
Students wishing to coach athletics in the State of Arkansas must obtain a Coaching Endorsement from the Arkansas State Department of Education.

All individuals enrolled in teacher licensure programs who wish to coach, will have to wait until completion of their degree program and until they have received an initial teaching license.

Students who have teaching licensures from another subject area who complete the coaching endorsement course of study and successfully complete Praxis #10091 coaching will meet requirements for an Arkansas coaching endorsement.

The BS in Health and Exercise in Secondary Education offered in the Department of Health Sciences includes all required courses necessary for the Coaching Endorsement.

After obtaining an Arkansas Teaching Licensure, students may then add the Coaching Endorsement by:
Completing the required program of study
HSCI 2372 Care & Prevention of Injuries
HSCI 3302 Exercise Physiology
HSCI 3372 Advanced First Aid
HSCI 3210 Individual Sports
HSCI 3402 Structural Kinesiology
or BIOL 1411 Human Anatomy and Physiology I
HSCI 3310 Coaching Theory
HSCI 4350 Methods of Teaching Physical Education
Licensure
Praxis II: # 0095 Physical Education: Content and Design
Leisure Science Program: (LESC)

The Department of Health, Human Performance and Sport Management offers leisure science and wellness courses to help students to develop appreciation, knowledge, and understanding of the importance of exercise in daily living.

Leisure science and wellness courses also enable students to develop a satisfactory level of skill in leisure time activities. Emphasis is placed on developing an individual lifetime activity program to improve health-related fitness components.

Courses in Health Sciences
HSCI 1101 Dieting and Weight Control
A practical short course designed to teach the proper methods of dieting and controlling body weight. Students will be taught how to determine, achieve, and maintain their correct body mass by using the scientific principles of proper nutrition and exercise. The futility of using drugs and fad diets to control weight will be explained. One credit hour.

HSCI 1102 Substance Abuse and Addiction
A practical short course designed to provide basic knowledge of drug abuse and addiction. Students will evaluate the role of drugs and other addictive behaviors in their life, and identify their risk factors for abuse or dependence. Students will be given information on available resources and options for behavior change and coping skills. One hours lecture/discussion per week. One credit hour.

HSCI 1103 Smoking Cessation
A practical short course designed to explore nicotine dependency/addiction and smoking cessation options. Based on assessment of individual tobacco use and knowledge of the advantages and disadvantages of smoking cessation options, students will plan and implement, if appropriate, a strategy for long term smoking cessation. One hour lecture/discussion per week. One credit hour.

HSCI 1104 Stress Management
A practical short course designed to assist the individual in identifying sources and situations that trigger reactions, both positive and negative, that display the physiological stress response. The individual will be taught how to identify stressors in their lives and explore possible ways of changing responses in order to develop satisfactory reactions to these stressors. The approach to this course is both personal and practical. One hour lecture/discussion. One credit hour.

HSCI 1170 Cardiopulmonary Respiration
Current lifesaving techniques used on individuals with heart or breathing emergencies. Appropriate first aid techniques also included. Two hours lecture/laboratory. One credit hour.

HSCI 1370 Personal Health
Designed to develop the understanding, attitudes, and practices which contribute to optimum physical, mental, and social well-being. Emphasis on major health problems and causes of death in various age groups. Three hours lecture per week. Three credit hours.

HSCI 2303 The Theory and Practice of Health Education
Prerequisite: HSCI 1370 Personal Health or departmental approval. An introduction to the scientific basis for developing health education interventions from program assessment through program evaluation. History, theory, concepts and applications will be discussed. Issues related to the design of relevant, practical and effective health education programs will be considered. Three hours lecture per week. Three Credit hours.

HSCI 2330 Introduction to Sport Management
This course will provide an overview of all facets of sports including management, career opportunities, marketing and promotion, public relations, fund raising, economics and finance, legal and ethical issues, and event and facilities management. Three hours lecture per week. Three Credit hours.

HSCI 2372 Care and Prevention of Injuries
Care, prevention, and treatment of injuries to various parts of the body; taping and wrapping; laboratory practicum activities; exercise therapy techniques and basic understanding necessary to sound exercise programs. Three hours lecture/laboratory per week. Three credit hours.
HSCI 3195 Practicum in Health Education
Prerequisites: junior standing, consent of program coordinator. Directed observation and supervised field work in a health education professional setting. Emphasis on planning, conducting, and evaluating activities in the program. One credit hour for 30 clock hours. One credit hour.

HSCI 3196 Practicum in Exercise Science
Prerequisites: HSCI 2302, consent of program coordinator and instructor of HSCI 2302. Practicum students will administer physical fitness tests to those enrolled in HSCI 2302 at both the beginning and end of the semester. They will help prescribe exercise and be responsible for helping HSCI 2302 class members achieve their stated fitness goals. This aid will consist of advice and motivation, leadership of exercise groups, nutrition planning, and modification of exercise prescriptions where required. One credit hour for 30 clock hours. One credit hour.

HSCI 3210 Teaching Individual Sports
The course is an examination of the theory and practice of teaching and coaching: tennis and golf. Two hours lecture per week. Two credit hours.

HSCI 3211 Health and Safety in Early Childhood
A practical short course designed to provide an introductory experience to the basic concepts of health and safety in early childhood environments. Specific attention is given to recognition of common illnesses in young children, infection control practices, in jury prevention, and basic emergency treatment procedures. Some of the regulations that guide health and safety practices in early educational environments will be examined. Two hours lecture per week. Two credit hours.

HSCI 3212 Teaching Individual Sports II
This course is an examination of the theory and practice of teaching/coaching Tumbling and Track. Two hours lecture per week. Two credit hours.

HSCI 3220 Teaching Team Sports
The course is an examination of the theory and practice of teaching and coaching: basketball, volleyball, and baseball. Two hours lecture per week. Two credit hours.

HSCI 3222 Teaching Team Sports II
This course is an examination of the theory and practice of teaching/coaching baseball/fast-pitch softball, soccer, and football. Two hours lecture per week. Two credit hours.

HSCI 3302 Exercise Physiology
Prerequisites: HSCI 3412 or department approval. The relationship between regular, moderate exercise and the resultant increase in the efficiency of the heart, lungs, and muscles. Students learn to assess fitness by the use of various laboratory instruments and techniques and to improve fitness by the judicious use of specific training programs. Two hours lecture, two hours laboratory. Two hour credit.

HSCI 3310 Coaching Theory and Methodology
Course is designed to improve the knowledge and understanding of methods and coaching theories. Students learn how to manage young athletes in conditioning, skill development, competition, motivation, and strategies. Three hours lecture per week. Three credit hours.

HSCI 3320 History of Physical Education
A study of the historical development of organized physical activity designed to improve the understanding and appreciation of the purpose, value, nature, scope, and significance of physical education throughout history. Three hours lecture per week. Three credit hours.

HSCI 3330 Teaching PK-5 Physical Education
This course is designed to help students understand the need for an effective pre kindergarten – 5 physical education program. It will provide the prospective PK-5 school classroom teacher, as well as the PK-5 physical education specialist, with a knowledge base in the principles of physical fitness, elementary physical education curriculum planning and appropriate selection of physical activities for children. The students will be working with hands-on projects integrating the discipline of physical education and other curriculum subjects found in grades PK-5th. Three hours lecture per week. Three Credit hours.

HSCI 3331 Legal/Ethical Issues in Sport
Prerequisite: HSCI 2302. Sport and entertainment (amateur and professional) activities are held in facilities that create unique opportunities for the sport and entertainment business manager. This course offers a comprehensive look at the discipline of facility management and event planning/operations. Three hour lecture per week. Three credit hours.

HSCI 3332 Sport Facility and Management
Prerequisite: HSCI 2330. Sport and entertainment (amateur and professional) activities are held in facilities that create unique opportunities for the sport and entertainment business manager. This course offers a comprehensive look at the discipline of facility management and event planning/operations. Three hour lecture per week. Three credit hours.

HSCI 3333 Governance & Management of Sport
Prerequisite: HSCI 2330. This course is designed to familiarize students with the concepts of governance, policy, decision-making, organizational behavior, and human resource management in the sport context. Through various individual and group assignments, students will gain knowledge and develop skills relevant to becoming an effective sport administrator. Emphasis will be placed on learning the structure of common sport organizations at various levels (scholastic, recreational, amateur, professional and others) as well as organizational behavior theory and common human resource issues (staffing, performance appraisal and leadership). Three hours lecture per week. Three credit hours.

HSCI 3334 Sports Marketing Management
Prerequisite: HSCI 2330. This course investigates principles and processes in sport marketing and sales. Focuses on research and development, sport promotion, sport sponsorship, advertising, merchandising, and distribution of sporting goods. Three hours lecture per week. Three credit hours.

HSCI 3335 Sport Finance and Economics
Prerequisite: HSCI 2330. In this course, students will be introduced to current economic and financial issues confronting managers in the sport industry. Three hours lecture per week. Three credit hours.

HSCI 3372 Advanced First Aid
Training individuals to realize ethical and legal obligations in rendering competent first aid in case of accident or injury until a physician can be found. American Heart Association advanced first aid certification on successful completion of the course. Three hours lecture per week. Three credit hours.

HSCI 3374 Community Health Agencies
Principles and practices of public health and voluntary health programs and agencies. Students make guided observation in laboratory situations and engage in seminars. Three hours lecture per week. Three credit hours.
HSCI 3377 Drug Ed. K-12
An in-depth study of drug education designed to help teachers, administrators, and other special interest groups present drug education programs. Three hours lecture. Three credit hours.

HSCI 3391 Cooperative Education in Health Education
Prerequisites: junior standing, acceptance as a health sciences major, minimum GPA of 2.50, and consent of program coordinator. Cooperative education seeks to integrate academic and professional work experiences. Students will be placed in a work setting consistent with their health sciences career objectives. This course requires a minimum of 200 semester work hours. Three credit hours.

HSCI 3401 Nutrition
Fundamental principles of human nutrition, nutritional value of foods, nutritional requirements of individuals at all ages, application of principles of nutrition under various physiological and economic conditions. Four hours lecture-demonstration per week. Four credit hours.

HSCI 3402 Structural Kinesiology
Prerequisites: HSCI 3412 or BIOL 1411 or BIOL 1412 or equivalent or department approval. This course is a study of muscles, bones and joints as they are involved in the science of movement. Several physiological and mechanical principles are included to increase the understanding of the structures discussed in the course content. Four hours lecture-demonstration per week. Four credit hours.

HSCI 3410 Biomechanics of Human Movement
Prerequisites: HSCI 3402 and MATH 1302 or department approval. This course is intended to serve as an introduction to the biomechanics of human movement, including terminology and mechanical concepts using both quantitative and qualitative problems and applications. Three hours lecture and one hour lab per week. Four credit hours.

HSCI 3412 Applied Human Science
This course is designed to develop within the prospective health, physical education and wellness professional an understanding and applicable knowledge of the human organism. Those systems appropriate for understanding humans within the activity setting are emphasized such as the skeletal, muscular, nervous, circulatory, endocrine, and respiratory. Three hours lecture and one hour lab per week. Four credit hours.

HSCI 3422 Exercise, Wellness & Lifestyle
This course is designed to give the student an initial fitness assessment and exercise prescription experience. Basic concepts of assessment and principles of physical training will be covered. Students will implement an individual training program and demonstrate proficiency in assessment techniques of various skill and health-related fitness components. This course also requires students to actively participate in field work consisting of advice and motivation, leadership of exercise groups, nutrition planning, and modification of exercise prescriptions. Three hour lecture and one hour lab per week. Four credit hours.

HSCI 4340 Adapted Physical E. K-12
Course presents the philosophy and methods pertaining to the adaptation of physical education for handicapped and exceptional students. A basic knowledge of handicapped conditions and their complications for participating in physical education along with classroom, laboratory, and practical experience will be provided to increase the awareness of the handicapped and to facilitate the application of knowledge to real life situations. Dual-listed in the UALR Graduate Catalog as HSCI 5340. Three hours lecture per week. Three credit hours.

HSCI 4350 Methods Teaching Phys Ed 6-12
A study of the methods and techniques of teaching physical activity in high school physical education programs. Emphasis is on opportunities to learn about organizing and planning programs, developing lesson plans, selection of activities, and evaluation procedures. Three hours lecture per week. Three credit hours.

HSCI 4371 Health Education Concepts and Applications
Examination of the concepts, philosophy, and applications of health education in public, private, professional, and commercial organizations that exist to improve and maintain health. Dual-listed in the UALR Graduate Catalog as HSCI 5371. Three hours lecture per week. Three credit hours.

HSCI 4372 First Aid Instructor Training
Prerequisites: HSCI 3372, current American Red Cross first aid certification. Students under supervision develop a lesson plan, observe teachers, develop tests, and participate in the American Red Cross first aid program. Instructor training course for candidates to become certified by the American Red Cross to teach standard first aid and personal safety. Three hours lecture per week. Three credit hours.

HSCI 4373 Controversial Issues in Health Education
Designed to expand the health educators knowledge of health issues as they are influenced by laws, public opinion, and scientific knowledge; an in-depth study of current controversial issues in health education. Dual-listed in the UALR Graduate Catalog as HSCI 5373. Three hours lecture per week. Three credit hours.

HSCI 4374 Family Life and Sex Education
A study of dating, engagements, marriage, children, divorce, and sexual behavior patterns. Three hours lecture per week. Three credit hours.

HSCI 4376 Mental Health Education
Examination of methods to be used by teachers to develop the mental health of individual students. Emphasis on the health educator’s role in reducing mental and emotional problems. Three hours lecture per week. Three credit hours.

HSCI 4378 Organization and Administration of Health Education Programs
Prerequisites: HSCI 2303 or department approval. Designed to provide a foundation in the organization and management of community-based health education programs. Students will explore, in depth, theories, models, strategies, and methods of application to prevent and solve societal health problems. Dual-listed in the UALR Graduate Catalog as HSCI 5378. Three hours lecture per week. Three credit hours.

HSCI 4379 Methods and Techniques of Teaching Health Education
Prerequisite: HSCI 2303 or department approval. This course will focus on basic philosophic structure of an efficient, meaningful, and effective application of health education, teaching methods, learning models and theories. Students will gain experience in the organization and planning of programs intended to motivate, sustain individual behavior, and change community attitudes and policies. Three hour lecture per week. Three hour credit.

HSCI 4380 Health Education Program Evaluation
Prerequisites: HSCI 4371 or department approval. This course is designed to provide students with an opportunity to learn about program evaluation and measurement concepts in health education and their application. Content includes: evaluation terminology, how to write measurable objectives, how to identify evidence based models, how to design and collect data using quantitative and qualitative methods, how to interpret data. Three hours lecture per week. Three credit hours.
HSCI 4381 Health Sciences Seminar  
Prerequisites: HSCI 1370, HSCI 2303, HSCI 4371, HSCI 4373, HSCI 4378, and HSCI 4379, or department approval. This course provides a detailed review of the analysis and application of the major responsibilities and competencies required for national certification as a health education specialist. Emphasis will be placed on the practical application of health education theories and models. Three hours lecture per week. Three hours credit.

HSCI 4384 Motor Development  
Prerequisites: HSCI 3412 or department approval This course analyzes the basic concepts relating to human motor development. Basic research and relevant theories of general human development are discussed in relation to motor development and the learning of motor skills. The course provides an understanding of the motor development from early childhood through adulthood. Three hours per week lecture. Three hours credit.

HSCI 4391 Cooperative Education in Health Education  
Prerequisites: junior standing, acceptance as a health sciences major, minimum GPA of 2.50, minimum of one semester of HSCI 3391, and consent of program coordinator. Cooperative education seeks to integrate academic and professional work experiences. Students will be placed in a work setting consistent with their health sciences career objectives. This course requires a minimum of 200 semester work hours. Three credit hours.

HSCI 4194, 4294, 4394 Workshop in Health Education  
Provides opportunities for students, in-service teachers, and interested individuals to work and study with health education professionals. The student can expect to spend two to four hours per week (15 week semester) on the workshop for each hour of credit earned. The exact hourly commitment per week will depend on the nature of the workshop and will be specified in advance by the instructor. One, two, or three credit hours.

HSCI 4399 HSCI Special Topics  
Prerequisite: HSCI 2330. Selected topics of current relevance reflecting interest in specialized areas of health education, human performance, and sport management. Course topics will be announced in advance. This is a 3 credit hour lecture course.

HSCI 4402 Fitness Management  
Prerequisites: BIOL 1411, 1412, HSCI 3302 or the equivalents. This course is designed to train students in the theory and skills required for the administration of fitness programs in industry, YMCAs, rehabilitation clinics, and similar facilities. Emphasis will be on standards and guidelines for facility staffing, programming, and equipment. Overview and discussion of organizational structure, client screening, emergency/safety procedures, and legal issues. Two hours lecture and two hours of program/facility fieldwork per week. Four credit hours.

HSCI 4100-4600 Independent Study in Health Education  
Prerequisite: consent of department chairperson. Provides an opportunity for advanced students to conduct an in-depth study in a specific area of interest or a special problem. May be taken for one to six credit hours. The student is expected to spend two to four hours per week on the project for each hour of credit earned. The exact hourly commitment per week will depend on the nature of the project and will be agreed on in advance by the student and instructor. One, two, three, four, five, or six credit hours.

HSCI 4695 Internship in Health Education  
Prerequisites: senior standing, 3195, 3196, consent of program coordinator. Directed observation and supervised field work in a health education professional setting. Emphasis on administration, supervision, and program leadership in public, private, or voluntary health agencies, institutions, or business. Six hours credit for 200 clock hours. Six credit hours.

Courses in Leisure Science (LESC)  
LESC 1100 Team Sports I  
Theory and practice needed to understand and develop an appropriate level of skill in flag football and volleyball. One credit hour.

LESC 1101 Team Sports II  
Theory and practice needed to understand and develop an appropriate level of skill in basketball and softball. One credit hour.

LESC 1102 Sports Officiating  
Emphasis is placed on developing the mechanics of signals, rules, and regulations to successfully officiate football, basketball, baseball, and softball. Practical applications of signals, rules, and regulations will be applied by the actual officiating of games. One credit hour.

LESC 1103 Beginning Ice Skating  
For individuals who do not know how to ice skate. Emphasis on fundamentals, safety, and the basic steps. One credit hour.

LESC 1105 Beginning Swimming  
For nonswimmers. Emphasis on fundamentals of swimming and water safety and the basic strokes: front crawl, back crawl, elementary backstroke, and side stroke. One credit hour.

LESC 1106 Scuba Diving  
Theories and practice in the skills involved in the safe and effective use of snorkel, fins, face mask, and scuba equipment. Deep water training sessions are required for certification. A fee is charged for use of equipment and expense of deep water training sessions. One credit hour.

LESC 1107 Water Polo  
Fundamental knowledge, techniques, and skills necessary to develop an understanding of and ability to play water polo. One credit hour.

LESC 1108 Water Aerobic Exercise  
This course incorporates the health-related fitness components of muscular strength, muscular endurance and cardiovascular endurance in an aquatic environment. Due to increased resistance provided by water overload training, improvement should occur in these areas. Deep water exercises such as water walking and water jogging along with aerobic exercises done to music, combine to make up a stress-free fitness program. The ability to swim is not a prerequisite for water aerobic exercise. One credit hour.

LESC 1109 Racquetball  
Emphasis is on developing skills in racquetball, presenting information on equipment safety, preliminaries to the strokes in racquetball, and introduction of the game itself. Practical application will enable the novice to develop both physical and mental skills to achieve in racquetball. One credit hour.

LESC 1111 Restrictive Activity  
Designed for men and women who are physically unable to participate in other physical education activities. A statement from the family physician is required regarding the nature of the physical problem. One credit hour.

LESC 1112 Judo  
Theory and practice of fundamentals of judo. Emphasis on the development of skills, rules, regulations, and necessary equipment. One credit hour.

LESC 1113 Karate  
Theory and practice of fundamentals of karate. Emphasis on the development of skills, rules, regulations, and necessary equipment. One credit hour.

LESC 1114 Self-Defense  
Fundamentals of self-defense designed for the individual interested in studying the scientific principles of gravity and body control over opposing forces as a self-protective device. One credit hour.

LESC 1115 Hunter Safety  
A basic course in the principles of safe hunting. Qualifies students over 21 years of age for an Arkansas Game and Fish Commission Certificate as a Hunter Safety Instructor. One credit hour.
LESC 1116 Beginning Tennis
Emphasis on rules, scoring, selection of racket, grip, footwork, and body positioning. Also emphasizes forehand, backhand, serve, net volley, lob, fundamental strategy, and techniques of singles and doubles play. One credit hour.

LESC 1117 Beginning Golf
Theory and practice of fundamental skills and techniques of golf. Emphasis on rules and etiquette, use of one wood and three irons, grip, stance, backswing, head position, follow-through, approach shots, full strokes, and putting. A fee is charged. Held off campus. One credit hour.

LESC 1118 Beginning Badminton
Theory and practice of fundamental skills and techniques of badminton. Emphasis on stroke perfection and on strategy and techniques of singles and doubles play. One credit hour.

LESC 1119 Beginning Bowling
Theory and practice of fundamentals of bowling. Emphasis on four-step approach, consistency, body position, release, spot bowling, follow-through, timing, rebound, scoring, rules, and bowling etiquette. A fee is charged. Held off campus. One credit hour.

LESC 1120 Beginning Horseback Riding
Fundamental knowledge, techniques, and skills needed to develop appropriate skill. Emphasis on care of and adjustment to the horse and safety in riding. The walk, trot, canter, and introduction of jumping will also be emphasized. A fee is charged. Held off campus. One credit hour.

LESC 1121 Fencing I Beginning
An introduction to foil fencing. Designed to provide a sound basic understanding of the history, rules, etiquette, and safety aspects of the sport of fencing. Develops basic technical and tactical skills needed for novice-level competition through emphasis on basic offense and defense, continuation of attack, compound attacks, and practical bouting. One credit hour.

LESC 1122 Tumbling
This course includes the theory and practice for conditioning and developing basic skills in tumbling. Intermediate skills will be introduced during the latter half of the semester. Development of strength and flexibility is emphasized. One credit hour.

LESC 1123 Body Mechanics and Conditioning
Emphasis on self-improvement in fitness, conditioning, nutrition, strength development, weight loss or gain, efficient body mechanics, posture, and decreasing or increasing body measurements. One credit hour.

LESC 1124 Stretch/Stress Program
Emphasis is placed on a series of relaxing and effective stretches to help relieve tension, increase flexibility, and range of motion. The stress reduction section provides techniques to help relieve stress and tension. One credit hour.

LESC 1125 Lifetime Fitness
Emphasis is placed on developing an individual lifetime program to improve the health-related components of fitness and wellness. Practical application of principles of exercise and the science of nutrition will be major components in achieving and maintaining ideal body weight. One credit hour.

LESC 1126 Walking to Fitness
Emphasis is placed on developing an individual level of walking performance. Practical applications of principles of exercise and the components of an effective cardiovascular workout are used in achieving fitness through a walking program. One credit hour.

LESC 1128 Weight Lifting/Training
An introduction to the fundamentals of weight lifting applicable to the development of muscular strength and endurance. Principles of exercise, body composition goals, lift techniques, safety instruction, and flexibility maintenance are emphasized. One credit hour.

LESC 1131 Aikido
Theory and practice of fundamentals of Aikido. Concentration will be on the development of skills, rules, regulations, and necessary equipment. One credit hour.

LESC 2103 Intermediate Ice Skating
Review of material in LESC 1103. New material includes: back crossover, T stop, back crossover in a figure eight pattern, fast forward crossover, three turns, and T take off; review of door carries, forced outside and inside edges, open Mohawk turn, one foot snow plow, hockey stop, spin, and bunny hop. One credit hour.

LESC 2105 Intermediate Swimming
Prerequisite: LESC 1105 or equivalent. Review of three basic strokes: front crawl, back crawl, and elementary breaststroke. Coordinated stroking in side strokes, breaststroke, inverted breaststroke. Development of strong isolated arm strokes and leg kicks, safety and survival skills, simple diving, simple rescue skills, artificial respiration, and distance swimming. One credit hour.

LESC 2116 Intermediate Tennis
Prerequisite: LESC 1116 or equivalent. Review of rules and scoring, selection of racket, grip, footwork and body positioning, forehand, backhand, serve and volley strokes, and game strategy. Developing the approach shot, lob, and overhead, and strengthening the volley and serve. Analysis of singles and doubles play strategy. One credit hour.

LESC 2117 Intermediate Golf
Prerequisite: LESC 1117 or equivalent. Review of the game of golf: rules, etiquette, selection of clubs, grip, stance, backswing, head position, follow-through, approach shots, full strokes, and putting. Appropriate use of one, three, and five woods and two, three, five, seven, eight, and nine irons. Irons: short approach shots, high loft, distance shots; woods: driver and use on fairway; putting: playing from rough hillside lies and sand traps. A fee is charged. Held off campus. One credit hour.

LESC 2119 Intermediate Bowling
Prerequisite: LESC 1119 or equivalent. Review of scoring rules, bowling etiquette, fundamentals, consistency, four-step approach, body position, aiming, back swing, release, follow-through, and rebound. Analysis of three-, four-, and five-step approaches, natural hook, severe hook, backup, and straight release; theories of aiming and principles of motion as they apply to bowling. A fee is charged. Held off campus. One credit hour.

LESC 2120 Intermediate Horseback Riding
Prerequisite: LESC 1120 or equivalent. Review and perfection of walk, trot, and canter, with emphasis on effective leads; effective use of rider’s body, hands, and legs. Introduction to barrel and cross-country course. A fee is charged. Held off campus. One credit hour.

LESC 2121 Fencing II Intermediate
An intermediate course designed to improve technical and tactical skills in the use of the foil. Intensive review of Fencing I, attacks on the blade, compound attacks, defense against compound attacks, tactics, defense, rules, and officiating; individual lessons, practice bouting, and class competition. One credit hour.

LESC 2122 Intermediate Gymnastics
Prerequisite: LESC 1122 or equivalent. Review of conditioning, basic skills in tumbling, and the vault. Free exercise routines, balance beam, and uneven bars for women; pommel horse, still rings, horizontal bar, and parallel bars for men. Introduction to composition of gymnastic routines. Strength and flexibility are emphasized. Students will perform required skills and routines and create routines. One credit hour.
LESC 2122 Intermediate Gymnastics
Prerequisite: LESC 1122 or equivalent. Review of conditioning, basic skills in tumbling, and the vault. Free exercise routines, balance beam, and uneven bars for women; pommel horse, still rings, horizontal bar, and parallel bars for men. Introduction to composition of gymnastic routines. Strength and flexibility are emphasized. Students will perform required skills and routines and create routines. One credit hour.

LESC 2123 Body Mechanics II
Methods and techniques of developing strength, flexibility, and cardiovascular fitness using aerobic and self-improvement exercises. Conditioning will start slowly and progress to desirable levels of stress. One credit hour.

LESC 3103 Advanced Ice Skating
Review of material covered in LESC 2103. New material includes: squat and shoot-the-duck, review edges, layover step, layover and return, spinning, forward pivots, two-foot spins, half Mapes jumps, outside forward rolls, and spirals. One credit hour.

LESC 3105 Advanced Swimming
Prerequisite: LESC 2105 or equivalent. Review of coordinated strokes, side strokes, breaststroke, butterfly, and inverted breaststroke. Continued development of isolated arm strokes and leg kicks, safety and survival skills, rescue skills, and artificial respiration. Emphasis on coordinated strokes for extended distances, trudgen and trudgen crawl, floating and survival skills, surface diving, and underwater swimming and diving. One credit hour.

LESC 3106 Advanced Scuba Diving
Review of basic scuba techniques and safety procedures. Emphasis on water diving experience; safe diving procedures, limited visibility diving, light salvage and recovery diving, and deep and decompression diving. Advanced National Association of Underwater Instructors open water certification course. One credit hour.

LESC 3116 Advanced Tennis
Prerequisite: LESC 2116 or equivalent. Review of tennis fundamentals. Continued development of all strokes. Emphasis on development of serve, greater force and addition of spins, overhead smash, different types of lobs, different types of volleys, ground stroke, slice, and chop. Concentration on skill development in singles and doubles play and practice in tennis officiating. One credit hour.

LESC 3117 Advanced Golf
Prerequisite: LESC 2117 or equivalent. Review of golf fundamentals. Emphasis on development of approach shots, full shots with a club, and playing difficult lies, with concentration on improving putting skills. A fee is charged. Held off campus. One credit hour.

LESC 3119 Advanced Bowling
Prerequisite: LESC 2119 or equivalent. Review of bowling fundamentals. Emphasis on developing skill using a natural or severe hook. Concentration on body mechanics and principles of motion. A fee is charged. Held off campus. One credit hour.

LESC 3120 Advanced Horseback Riding
Prerequisite: LESC 2120 or equivalent. Emphasis on fine qualities of gaits; cause and solution to resistance problems; introduction to hunt seat; false and counter leads; cross-country and jumping tests; and understanding the health of the horse. A fee is charged. Held off campus. One credit hour.

LESC 4105 Lifeguard Training
Prerequisite: student must be able to swim 500 yards continuously. This is a course which will provide instruction of skills necessary for lifeguarding, CPR, and first aid training which will lead to Red Cross Lifeguard Certification. One credit hour.

LESC 4205 Water Safety Instructor
Prerequisites: LESC 4105, American National Red Cross water safety instructor’s certification. Methods and techniques of teaching swimming. Two hours lecture, two hours laboratory. Two credit hours.
### Department of Mathematics & Statistics

**Chairperson:**
McMillan, Thomas C, Professor

**Professors:**
Kaufmann, Eric R.
Kosmatov, Nickolai E.
Wang, Xiaoshen
Ye, Xiu

**Associate Professors:**
Cox, Cassandra L.
Elsalloukh, Hassan
Fulmer, James R.
Peter, Thomas F.

**Assistant Professors:**
Cui, Jintao
Legette, Lakeshia R.
Lu, Lianfang
Yu, Xian

**Senior Instructors:**
Hardeman, Melissa A.
LeGrand, Denise J.
Umphers, Ida S.
Watson, Theresa A.

**Advanced Instructors:**
Hundley, Miriam M.
Jackson, Christy L.

**Instructors:**
Schonert, David A.
Streett, Rebecca A.
Tapp, Marvelyn H.

The objectives of the department are to prepare students to enter graduate school, to teach at the elementary and secondary levels, to understand and use mathematics in other fields of knowledge with basic mathematical skills for everyday living, and to be employed and to act in a consulting capacity on matters concerning mathematics.

The department offers degrees in mathematics (bachelor of science and bachelor of arts) and secondary teacher licensure in mathematics (bachelor of science and bachelor of arts). The department also offers minors in mathematics and statistics.

### General Information

#### Admission Requirements

Students can apply for admission to any mathematics major using their online accounts (BOSS). Decisions regarding equivalency of courses and situations in which students have tested out of courses will be made by the department chairperson.

#### Scholarships and Awards

**Scholarships**

- The DeWoody and Emily Dickinson Math Scholarship is awarded to a full- or part-time mathematics major in his/her sophomore or junior year. In selecting a recipient for the Dickinson Scholarship, academic accomplishments are given the highest consideration, with additional consideration given to financial need, leadership skills, and involvement with student/math activities.
- The Jerry and Sherri Damerow Mathematics Scholarship is awarded to a full- or part-time student majoring in mathematics. Preferences are given to juniors and seniors, and academic accomplishment and financial need are strongly considered. This scholarship may be used to support undergraduate research.
- The Ma Endowed Family Scholarship is awarded to a full- or part-time student majoring in Mathematics. Academic accomplishment and financial need are strongly considered when selecting a recipient.
- The Linda and Tom McMillan Mathematics Scholarship is awarded to a full- or part-time student majoring in mathematics. Preferences are given to juniors and seniors, and academic accomplishment and financial need are strongly considered.

**Awards**

- Outstanding Undergraduate Student
- Outstanding Graduate Student
- Outstanding Graduating Senior
- Outstanding Achievement by and Undergraduate Student
- Outstanding Achievement by a Graduate Student
- Outstanding Teaching by a Graduate Student
- Outstanding Service Award
- Outstanding Tutor Award

### Honors Program in Mathematics

The department offers an honors program to permit exceptional students to pursue advanced study and receive recognition for its completion. The honors program is distinct from graduation with honors and does not replace it.

Participants in the honors program must be mathematics majors with at least junior standing (60-90 credit hours). The students will be selected by a faculty committee, normally during the junior year and usually before the second semester. Minimum admission requirements are a 3.25 grade point average overall and a 3.25 grade point average in all mathematics and statistics courses. These averages must be maintained for continued participation in the program. There will be at most five students in the program at one time.

For details about the program please contact the department office.

### Developmental Mathematics

Beginning in Fall 2012, Math 0321 – Pre-Core Mathematics will be offered to students who require additional prerequisite skills prior to enrolling in a core mathematics class. This is a course that is designed to prepare students with the necessary skills to be successful in college level mathematics. Topics include operations with real numbers (including exponents and radicals) and algebraic expressions, ratios, proportions, linear inequalities, linear and quadratic equations in one variable, linear equations in two variables, systems of linear equations, and logarithms. Summer 2012 will be the last semester MATH 0300 Elementary Algebra and MATH 0301 Intermediate Algebra will be offered. For information on alternative methods of receiving credit for a developmental mathematics course, students should contact the department chair.
Mathematics Placement Tests

Students may place into the following mathematics courses with appropriate scores on mathematics placement tests:

**Math 1302 – College Algebra**
- ACT Mathematics score of 21 or ACT Elementary Algebra score of 11.
- Mathematics SAT score of 500.
- COMPASS College Algebra Exam score of 40.
- COMPASS Algebra Exam score of 49.

**MATH 1303 Trigonometry, MATH 1342 Business Calculus, or MATH 1311 Applied Calculus I**
- COMPASS College Algebra Exam of 59.

**MATH 1451 Calculus I**
- COMPASS Trigonometry Exam score of 46.

**MATH 1452 Calculus II**
- A grade of 2 or greater on the AP Calculus AB Test.

Requirements for other courses may be obtained from the Department of Mathematics and Statistics. Credit by examination may be obtained for MATH 1302, 1303, 1451, 1452, 1321, and 1342. Call the Office of Testing Services and Student Life Research at (501) 569-3198 for details.

Major in Mathematics

**Bachelor of Science**

The bachelor of science degree is designed for students who plan to enter graduate school or who wish immediate employment as mathematicians. It requires MATH 1223, 2453, 2350, 3310, 3312, 3322, 4390, 4303, 4304, STAT 3352, six additional hours of upper-level mathematics or statistics electives to include either MATH 4310, 4306, or 4302. Six hours of German or French are strongly recommended for students who intend to obtain the PhD degree in mathematics.

**Bachelor of Arts**

The bachelor of arts degree requires MATH 1223, 2453, 2350, 3310, 3312, 3322, 4303, 4390, STAT 3352, and 9 hours of upper-level mathematics or statistics electives. Also, students seeking the bachelor of arts degree are required to complete a 2000-level second language course or demonstrate equivalent proficiency as measured by a competency test.

Secondary Teacher Licensure

Students wishing to teach mathematics at the secondary level must complete either a bachelor of science or a bachelor of arts in mathematics.

The bachelor of science degree within the secondary teacher licensure option consists of MATH 1223, 2453, 2350, 3310, 3312, 3322, 3330, 4381, 4383, 4303, 4304, 4390, and either 4310, 4306 or 4302; STAT 3352; and the minor in secondary education. See the Secondary Teacher Licensure” section for details.

The bachelor of arts in mathematics within the secondary teacher licensure option consists of MATH 1223, 2453, 2350, 3310, 3312, 3322, 3330, 4381, 4383, 4303, 4304, 4390; and STAT 3352; nine hours of upper-level MATH or STAT electives; and a minor in secondary education. See the Secondary Teacher Licensure” section for details.

Minor in Mathematics

The minor requires MATH 1451, 1452, 2453, 2350, and six hours of upper-level mathematics.

Minor in Statistics

The minor in statistics is designed for students who wish to apply their mathematical training in any of the many fields that employ statistics. It requires at least 12 hours of statistics courses, including STAT 3350, 3352, 3353, and either STAT 3351 or 4352. MATH 1223, 1451, and 1452 are also required. Statistics courses, except 3352, used for a minor may not be used to satisfy requirements for a major in mathematics.

Degree Requirements

**Bachelor of Science and Bachelor of Arts**

Recommended Curriculum

The recommended curriculum for both the bachelor of science and the bachelor of arts degree in mathematics is the same in the freshman, sophomore, and junior years.

**Bachelor of Science and Bachelor of Arts**

Freshman Year (30 hours)

- MATH 1302 College Algebra
- MATH 1451 Calculus I
- MATH 1303 Trigonometry
- MATH 1223 Introduction to Mathematics Software
- HIST 1311 History of Civilization I
- HIST 1312 History of Civilization II
- RHET 1311 Composition I
- RHET 1312 Composition II
- SPCH 1300 Speech Communication
- HIST 2311 U.S. History to 1877, or HIST 2312 U.S. History since 1877, or POLS 1310 American National Government

Sophomore Year (33 hours)

- MATH 1452 Calculus II
- MATH 2453 Calculus III
- MATH 2350 Introduction to Mathematical Proof
- ENGL 2337 World Literature, or ENGL 2338 World Literature Themes, or PHIL 2320 Ethics and Society
- ARHA 2305 Introduction to Visual Art, or MUHL 2305 Introduction to Music, or THEA 2305 Introduction to Theatre and Dance (6 hours)
- Social science core requirements (3 hours)
- Sciences core requirement (8 hours)
- Minor (6 hours)

Junior Year (27 hours)

- MATH 3322 Introduction to Differential Equations
- MATH 3312 Linear Algebra
- MATH 3310 Algebraic Structures I
- STAT 3352 Applied Statistics I
- Upper-level Mathematics or Statistics course (3 hours)
- Social science core requirements (3 hours)
- Minor (9 hours)

Senior Year – B.S. Degree (28 hours)

- MATH 4390 Senior Seminar
- MATH 4303 Advanced Calculus I
- MATH 4304 Advanced Calculus II
- MATH 4302 Complex Analysis
- or MATH 4310 Algebraic Structures II
- or MATH 4306 Topology
- Upper-level minor courses (6 hours)
- Upper-level electives (12 hours)

Senior Year – B.A. Degree (28 hours)

- MATH 4390 Senior Seminar
- MATH 4303 Advanced Calculus I
- Upper-level Mathematics or Statistics course (9 hours)
- Upper-level Minor courses (6 hours)
- Upper-level Electives (12 hours)
Courses in Mathematics (MATH)

MATH 0321 Pre-Core Mathematics
This is a course that is designed to prepare students with the necessary skills to be successful in college level mathematics. Topics include operations with real numbers (including exponents and radicals) and algebraic expressions, ratios, proportions, linear inequalities, linear and quadratic equations in one variable, linear equations in two variables, systems of linear equations, and logarithms. Two classroom hours plus required lab hours. Three credit hours.

MATH 0322 Pre-Core Mathematics
This course is a continuation of Math 0321 and intended for students who have modules left to complete from Math 0321.

MATH 0323 Pre-Core Mathematics
This course is a continuation of Math 0322 and intended for students who have modules left to complete from Math 0322.

MATH 0324 Pre-Core Mathematics
This course is a continuation of Math 0323 and intended for students who have modules left to complete from Math 0323.

MATH 1223 Introduction to Mathematics Software
Prerequisites: grades of C or greater in MATH 1302 and 1303, equivalent transfer courses. Symbolic and numerical manipulations in a Computer Algebra System (CAS); graphing; simple programming; spreadsheet fundamentals and mathematical typesetting. Four hours lab. Two credit hours.

MATH 1302 College Algebra
Prerequisite: A grade of C or greater in Math 0321 – Intermediate Algebra, a grade of AA, BA or CA in Math 0321 Pre-Core Mathematics, an equivalent transfer course, or an ACT Mathematics score of 21, or ACT Elementary Algebra score of 11, or SAT Mathematics score greater than or equal to 500. Study of functions, including but not limited to, absolute value, quadratic, polynomial, rational, logarithmic, and exponential; systems of equations; and matrices. Three hours lecture. Three credit hours.

MATH 1303 Trigonometry
Prerequisite: a grade of C or greater in MATH 1302, an equivalent transfer course, or a suitable score on a mathematics placement test Corequisite with consent of instructor: MATH 1302. Circular functions and their graphs, identities, angles and their measure, functions of angles, right triangles, Law of Sines, Law of Cosines, inverses of circular functions, solutions of trigonometric equations, complex numbers, and DeMoivre’s Theorem. Three hours lecture. Three credit hours.

MATH 1311 Applied Calculus I
Prerequisite: a grade of C or greater in MATH 1302 or an equivalent transfer course or an ACT Mathematics score of 24. Not intended for mathematical science majors or minors. Introduction to differential and integral calculus of algebraic functions and their technical applications in the areas of optimization, mean values, and area. Three hours lecture. Three credit hours.

MATH 1312 Applied Calculus II
Prerequisites: grades of C or greater in MATH 1303 and either 1311 or 1451, or equivalent transfer courses. Differential and integral calculus of algebraic functions, transcendental functions, and vector-defined functions; integration techniques, parametric equations, and differential equations. Three hours lecture. Three credit hours.

MATH 1315 College Mathematics
Prerequisite: A grade of C or greater in Math 0301 – Intermediate Algebra, equivalent transfer course, or an ACT Mathematics score of 21, or ACT Elementary Algebra score of 11, or SAT Mathematics score greater than or equal to 500. Set Theory; logic; probability and statistics, combinatorics, populations, samples, normal distribution, mean, variance and standard deviation; consumer mathematics and financial management, voting and apportionment, graph theory. Note: This course satisfies the state mandated requirement for the baccalaureate degree. Three hours lecture. Three credit hours.

MATH 1321 Quantitative and Mathematical Reasoning
Prerequisite: A grade of C or greater in Intermediate Algebra or an equivalent transfer course, or a grade of AQ, BQ, CQ, in any of UALR’s Pre-Core Mathematics courses (MATH 0321, MATH 0322, MATH 0323, MATH 0324), or a MATH ACT score of 21 or greater, or an ACT Elementary Algebra score of 11, or an SAT Mathematics score of 500 or greater. The overarching goal of Quantitative and Mathematical Reasoning is to provide students with mathematical understandings and skills to be productive workers, discerning consumers, and informed citizens. Students will solve problems using mathematical reasoning involving logic, proportions, algebra, and relations. In keeping with the tenets of student performance in a general education course, this course is designed to deliver instruction that focuses on process, conceptual understanding, communication and problem solving found in the following strands: (a) Personal, state and national finance (b) Statistics and probability (c) Mathematical modeling (d) Quantities and measurement. Students seeking a degree in a Non-STEM major are advised to take this course. Note: This course satisfies the state mandated requirement for the baccalaureate degree. Three hours lecture. Three credit hours.

MATH 1451 Calculus I
Prerequisites: grades of C or greater in MATH 1302 and 1303, equivalent transfer courses, or a suitable score on a mathematics placement test. Differential and integral calculus with applications to economics and management sciences. Three hours lecture. Three credit hours.

MATH 1452 Calculus II
Prerequisite: a grade of C or greater in MATH 1451 or an equivalent transfer course. Integration, the definite and indefinite integrals, L’Hopital’s rule, improper integrals, Taylor polynomials, infinite series, power series, polar coordinates, and conic sections. Three lecture hours and two lab hours. Four credit hours.

MATH 2310 Discrete Mathematics
Prerequisite: a grade of C or greater in MATH 1302. Emphasizes applications of mathematics in computer science and other areas of modern technology. The topics include mathematical reasoning, set theory, proofs by induction, number systems, relations, directed graphs, trees, and related topics of study. Three hours lecture. Three credit hours.

MATH 2350 Introduction to Mathematical Proof
Prerequisite: a grade of C or greater in MATH 1451. An introduction to formal mathematical proof writing in the context of axiomatics systems. Symbolic logic, elementary set theory, methods of proof, mathematical induction, functions and relations, and additional topics in the context of axiomatic systems. Three credit hours.

MATH 2453 Calculus III
Prerequisite: a grade of C or greater in MATH 1452 or equivalent transfer course. Three-dimensional analytic geometry, vectors, lines, planes, partial derivatives, multiple integrals, line integrals, and gradient fields. Three lecture hours and two lab hours. Four credit hours.

Note: FALL 2012 is the last semester MATH 1315 College Mathematics will be offered. Beginning SPRING 2013, all non-STEM majors will have the option to take MATH 1321 Quantitative and Mathematical Reasoning, instead of MATH 1315.
MATH 3310 Algebraic Structures
Prerequisite: a grade of C or greater in MATH 2350. An introduction to modern algebraic structures. Topics include equivalence relations, groups, isomorphisms, direct products, rings, fields, and integral domains. Three hours lecture. Three credit hours.

MATH 3311 Number Theory
Prerequisite: a grade of C or greater in MATH 1302. Basic representation, the fundamental theorem of arithmetic, combinatorial and computational number theory, fundamentals of congruences, solving congruences, arithmetic functions, primitive roots, prime numbers, quadratic congruences, additivity. Three hours lecture. Three credit hours.

MATH 3312 Linear Algebra
Prerequisites: grades of C or greater in MATH 1312 or 1452; and 2350. Vector spaces, bases, polynomials, Cayley-Hamilton Theorem, invariant subspaces, linear transformations, eigenvalues and eigenvectors, selected applications, Jordan canonical form. Three hours lecture. Three credit hours.

MATH 3322 Introduction to Differential Equations
Prerequisite: a grade of C or greater in MATH 1452 (may be corequisite with consent of instructor). Methods of forming and solving some important types of ordinary differential equations and their application to selected physical and biological models. Three hours lecture. Three credit hours.

MATH 3324 Mathematical Models
Prerequisites: grades of C or greater in MATH 2453, 3312, STAT 3350. A study of selected topics from the physical and biological sciences demonstrating the interaction between model building and mathematical systems. Three hours lecture. Three credit hours.

MATH 3325 Mathematics of Optimization
Prerequisites: grades of C or greater in MATH 2453, 3312, STAT 3350. Linear programming. Simplex and revised simplex algorithms. Transportation problems, networks and flows, games and decisions. Three hours lecture. Three credit hours.

MATH 3330 College Geometry I
Prerequisite: a grade of C or greater in MATH 1451. A survey of secondary school geometry, the axiomatic method; Euclidean geometry; an introduction to non-Euclidean geometry. Three hours lecture. Three credit hours.

MATH 4100, 4200, 4300 Independent Study
Prerequisites: consent of department chairperson and supervising faculty member. Studies of assigned topics chosen to develop investigative, analytical, research, or professional skills related to mathematics, culminating in a written paper. Three hours lecture. One, two, or three credit hours.

MATH 4302 Complex Analysis
Prerequisite: a grade of C or greater in MATH 4303 or consent of instructor. Algebra of complex numbers, analytic functions, integration, power series, Laurent series, and elementary conformal mappings. Dual-listed in the UALR Graduate Catalog as MATH 5302. Three hours lecture. Three credit hours.

MATH 4303 Advanced Calculus I
Prerequisite: a grade of “C” or greater in MATH 2453 and 2350. Derivatives, mean value theorem, L'Hospital's rule, integration, sequences, and a series of functions. Dual-listed in the UALR Graduate Catalog as MATH 5303. Three hours lecture. Three credit hours.

MATH 4304 Advanced Calculus II
Prerequisite: a grade of C or greater in MATH 4303. Functions of several variables, implicit function theorem, geometry of curves and surfaces, differential forms, Stoke's theorem and Green's theorem. Dual-listed in the UALR Graduate Catalog as MATH 5304. Three hours lecture. Three credit hours.

MATH 4305 Financial Mathematics
Prerequisite: MATH 1451 or equivalent. This course will cover some key procedures of the financial mathematics: determining equivalent measures of interest; discounting; accumulating; determining yield rates; estimating the rate of return on a fund; amortization. Three hours lecture. Three credit hours.

MATH 4306 Topology
Prerequisite: a grade of C or greater in MATH 2350 and MATH 2453. Topological spaces, connectedness, compactness, separation axioms, metric spaces, sequences, completeness, Urysohn's metrization theorem. Additional topics selected from the Tychonoff theorem, compactifications, homotopy, the fundamental group, retractions and fixed points, the fundamental group of surfaces. Dual-listed in the UALR Graduate Catalog as MATH 5306. Three credit hours.

MATH 4308 Integral Transform Theory
Prerequisite: a grade of C or greater in MATH 3322. Review of linear differential equations. The Laplace transform, functions of a complex variable, integration by the method of residues, the Laplace transform inversion integral. The Z-transform, the Z-transform inversion integral, difference equations, Fourier series, and the Fourier transform. Dual-listed in the UALR Graduate Catalog as MATH 5308. Three credit hours.

MATH 4310 Algebraic Structures II
Prerequisite: a grade of C or greater in MATH 3310. Continues the topics of Algebraic Structures I into more advanced topics of modern algebra including factor groups, polynomial rings, quotient rings, and extension fields. Three credit hours.

MATH 4323 Numerical Analysis
Prerequisites: grades of C or greater in MATH 2453, 3312, or equivalent courses; knowledge of a scientific programming language. Error analysis, fixed points and roots, interpolation, approximations, numerical differentiation and integration, linear systems, differential equations. Dual-listed in the UALR Graduate Catalog as MATH 5323. Three hours lecture. Three credit hours.

MATH 4361 History of Mathematics I
Prerequisite: grade of C or greater in MATH 1452. This course provides an overview of aspects of the history of mathematics from the Early Beginnings (before the sixth century B.C.), Classical Period (sixth century B.C. to fifth century), and Medieval and Renaissance Periods (sixth century to sixteenth century). This survey course discusses a broad range of the history of mathematics including a variety of topics over many consecutive time periods, and is organized so that there is more discussion than lecture. The course will consider both the growth of mathematical ideas and the context in which these ideas developed, in various civilizations around the world. Attention will be paid to how the history of mathematics or mathematical ideas is important in the teaching of these ideas in both secondary school and college. Three credit hours.

MATH 4362 History of Mathematics II
Prerequisite: grade of C or greater in MATH 1452. This course will provide an overview of aspects of the history of mathematics from the Early Modern Period (seventeenth and eighteenth centuries) and the Modern Period (nineteenth and twentieth centuries). This survey course discusses a broad range of the history of mathematics including a variety of topics over many consecutive time periods, and is organized so that there is more discussion than lecture. The course will consider both the growth of mathematical ideas and the context in which these ideas developed in various civilizations around the world. Attention will be paid to how the history of mathematics or mathematical ideas is important to the teaching of these ideas in both secondary school and college. Three credit hours.

MATH 4390 Senior Seminar
Prerequisites: senior standing and major status in the Department of Mathematics and Statistics. Students in the course prepare and present senior projects and portfolios, prepare and take Major Fields Assessment Test in mathematics, pick, solve, and submit the problems sections of professional journals. This course is offered in the fall semester only and is to be taken by mathematics majors planning to graduate in the fall or the following spring. Three credit hours.

MATH 4199-4399 Selected Topics
Prerequisite: consent of instructor. The content of this course changes on demand. For descriptive title of the content refer to the semester schedule. Dual-listed in the UALR Graduate Catalog at the 5000-level. One hour lecture for each hour credit. One, two, or three credit hours.
Courses in Mathematics Education (MATH)

The following courses are designed for the prospective early childhood, middle childhood, or secondary education teacher and cannot be used as part of the undergraduate major or minor in mathematics. For the courses appropriate to teacher licensure, contact the Department of Teacher Education.

MATH 3380 Mathematics I for Early Childhood
Prerequisites: admission to the early childhood/middle childhood education program (social studies/language arts specialty) and a grade of C or greater in MATH 1302 or 1315 or 1321. Problem solving, sets, system of whole numbers, system of integers, system of rational numbers, number theory, graphing, proportional reasoning, technology, and historical developments in mathematics. Includes mathematics content, teaching techniques, mathematics manipulatives, and technology. Emphasis on problem solving, reasoning, communication, and connections. Two hours lecture and two hours laboratory. Three credit hours.

MATH 3382 Mathematics II for Early Childhood
Prerequisites: admission to the middle childhood education program (mathematics/science specialty) and a grade of C or greater in MATH 3380. Second mathematics education course for early childhood education majors (no emphasis in mathematics). Problem-solving, estimation, number sense, development of computational algorithms, mental computation techniques, measurement of two- and three-dimensional objects, geometry, probability, data collection and analysis, technology, proportional reasoning, and historical developments in mathematics. Emphasis on problem solving, reasoning, communication, and connections. Two hours lecture and two hours laboratory. Three credit hours.

MATH 3383 Mathematics for Middle School
Prerequisites: admission to the middle childhood education program (mathematics/science specialty) and a grade of C or greater in MATH 1302. First mathematics course specifically for middle childhood education (mathematics/science specialty) majors. Problem solving; sets; number systems including whole numbers, integers, rational numbers, and real numbers; number theory; algebra; graphing; matrices; proportional reasoning; technology; and historical developments in mathematics. The course includes mathematics content, teaching techniques, mathematics manipulatives, and technology. Emphasis on problem solving, reasoning, communication, and connections. Two hours lecture and two hours laboratory. Three credit hours.

MATH 3384 Concepts in Geometry
Prerequisites: admission to the middle childhood education program and a grade of C or greater in MATH 3383 or MATH 3380. Problem solving, logic and sets, proofs, geometry as an axiomatic system, geometric figures in two and three dimensions, systems of measurement, congruence and similarity, geometry using coordinates, geometry using transformations, proportional reasoning, modeling real-world situations using geometry, networks, technology, and historical developments in geometry. Includes mathematics content, teaching techniques, mathematics manipulatives, and technology. Emphasis on problem solving, reasoning, communication, and connections. Two hours lecture and two hours laboratory. Three credit hours.

MATH 4380 Concepts in Probability and Statistics
Prerequisites: admission to the middle childhood education program and a grade of C or greater in MATH 3380 or MATH 3383. Problem solving, organizing data, averages and variation, regression and correlation, probability theory, normal distributions, sampling distributions, estimation, hypothesis testing involving one population, inferences about differences, proportional reasoning, technology, and historical developments in probability and statistics. Includes mathematics content, teaching techniques, mathematics manipulatives, and technology. Emphasis throughout the course is on problem solving, reasoning, communication, and connections. Two hours lecture and two hours laboratory. Three credit hours.

MATH 4381 Teaching Mathematics in Secondary School
Prerequisite: admission to the secondary education minor program or consent of the instructor. An overview of methods and materials used to teach secondary mathematics, techniques considered most effective, and appropriate assessment strategies. A link between mathematics content/skills and practical applications for classroom instruction. Includes mathematics content, teaching techniques, mathematics manipulatives, and technology. Emphasis throughout on problem solving, reasoning, communication, and connections. Required for secondary mathematics teacher licensure. Two hours lecture and two hours laboratory. Spring semester offering. Three credit hours.

Courses in Statistics (STAT)

STAT 2350 Introduction to Statistical Methods
Prerequisite: MATH 1302 or 1315 or 1321 or equivalent. Introduction to the fundamental ideas of statistics, including descriptive statistics, normal distributions, sampling experiments, tests of hypotheses, and elementary probability. This course cannot be applied as upper-level credit toward a major in mathematics. Three hours lecture. Three credit hours.

STAT 3350 Introduction to Probability
Prerequisite: a grade of C or greater in MATH 1452. Combinatorial theory, random variables, continuous and discrete distributions, expected value, jointly distributed random variables, conditional expectation, law of large numbers, central limit theorem. Three hours lecture. Three credit hours.

STAT 3351 Statistical Inference
Prerequisite: a grade of C or greater in STAT 3350. Point estimation, interval estimation, tests of statistical hypotheses, distribution free methods, regression, order statistics. Three hours lecture. Three credit hours.

STAT 3352 Applied Statistics I
Prerequisites: a grade of C or better in either MATH 1451 or 1311. Measures of central tendency and variation, probability distributions, sampling distributions, tests of hypotheses, confidence intervals. Three hours lecture. Three credit hours.

STAT 3353 Applied Statistics II
Prerequisites: a grade of C or greater in STAT 3352; knowledge of a scientific programming language. Analysis of variance, factorial experiments, unequal subgroups, multiple regression and correlation, analysis of covariance, uses of chi-square tests, tests of independence, goodness of fit. Three hours lecture. Three credit hours.

STAT 4352 Distribution-Free Statistical Methods
Prerequisite: a grade of C or greater in STAT 3352 or its equivalent. Comparison of classical and distribution-free tests of hypotheses, test assumptions, efficiency and related characteristics, Fisher’s method of randomization, ranking tests, tests based on the binomial distribution. Three hours lecture. Three credit hours.

STAT 4354 Design and Analysis of Experiments
Prerequisite: STAT 3351. Factorial experiments, randomized block designs, Latin squares, Graeco-Latin squares, analysis of covariance, incomplete block designs, distribution-free methods. Three hours lecture. Three credit hours.
The UALR Department of Nursing offers a ladder curriculum that includes an Associate of Science (AS) degree program as well as an on-line Baccalaureate of Nursing (BSN) Completion program.

The AS degree program is available in Traditional, Accelerated Traditional, LPN-RN Transition, and Paramedic-RN Transition formats.

General Information

Associate of Science in Nursing Program

The department offers an associate of science degree program in nursing. A traditional and a traditional accelerated option is available for those students seeking initial licensure. A transition (fast-track) option is available for qualified LPN/LPTNs, and paramedics. All options offer the knowledge, skills, and attitudes essential to the competent nurse and are taught in settings ranging from the classroom, campus skills, and simulation laboratories, to major area hospitals, outpatient facilities, and other health care facilities. The graduate is prepared to enter professional practice settings such as hospitals, long-term care facilities, physicians’ offices, and community settings.

The Associate of Science program is approved by the Arkansas State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC), 3343 Peachtree Road, NE, Suite 850, Atlanta, GA 30326, (404) 975-5000. Upon completion of the curriculum, the graduate is eligible to apply to take the National Council Licensing Examination for Registered Nurses (NCLEX-RN). Information regarding the comparison of nursing programs (tuition, fees, and length of programs) may be obtained from NLNAC.

Students who are considering a career in nursing should be aware that no application for initial Registered Nurse (RN) licensure will be considered by the Arkansas State Board of Nursing without state and federal criminal background checks by the Arkansas State Police and the Federal Bureau of Investigation. The Arkansas State Board of Nursing shall refuse to issue the RN license to any person who is found guilty of or pleads guilty or nolo contendere to any offense listed in Act 1208 of 1999, for details refer to the Arkansas Nurse Practice Act Sub-Chapter on Licensing. Persons requesting initial licensure may request a waiver from the Arkansas State Board of Nursing. The Department of Nursing requires a state/national criminal background check and drug screening on all students upon admission and annual scheduled drug screenings thereafter. Results may prohibit entry and/or progression in the program. Clinical agencies used for nursing laboratory may require additional criminal background checks, scheduled drug screening, and/or random drug screens for nursing students. Results of agency screening may prohibit participation in clinical laboratory. Nursing students prohibited from participation in laboratory at a clinical agency will not be permitted to maintain enrollment in the nursing program.
Program Options

Traditional Option/Accelerated Traditional Option

The course of study includes 31 credit hours in liberal arts and sciences and 34 lower-level nursing credits. The traditional option is summer (NURS 1300), fall, spring, fall, spring; the accelerated traditional option is offered summer (NURS 1300), fall, spring, summer, fall. All traditional option students complete NURS 1300 prior to unconditional admission.

Transition Option (LPN/LPTNs and Qualified Paramedics)

Transition option students enroll in NURS 1415 Nursing Role Transition, which prepares them for their roles as registered nurses (RN). Upon completion of the program, students are awarded 10 credit hours in nursing for NURS 1300, NURS 1205, and NURS 1505. The course of study includes 31 credit hours in liberal arts and sciences and 34 lower-level nursing credits.

Students enter in May and complete the program the following May. NURS 1415 is offered only during the summer semester and enrollment is limited to transition option students.

Transfer Students

Students previously enrolled in another nursing program must forward a letter requesting transfer and attach copies of all college/university transcripts. Letters and transcripts should be sent to the department chairperson. Students who are requesting transfer from another nursing program are also required to provide a letter of eligibility to reenter their previous nursing program in order to be eligible for consideration for entry into the UALR nursing program. If a student has failed a nursing course the request for transfer is classified as an academic reentry request and reentry policies apply. Students who have failed or withdrawn from more than one nursing course are not eligible for consideration for entry into the UALR nursing program.

Transfer equivalency information for required general education courses is available on the Arkansas Department of Higher Education website (http://acts.adhe.edu/). It is the responsibility of transfer students to confirm that transfer courses are equivalent to required general education courses.

Equivalencies and Credit by Examination

UALR offers credit by examination with some restrictions for courses; see Credit by Examination under the “Academics” section of this catalog. Credit by examination for NURS 1300, NURS 1205, and NURS 1505 is available to qualified paramedics and to diploma program transfers with certain restrictions. Information about credit by examination in nursing courses is available from the Department of Nursing.

Application/Admission Requirements

Traditional Option/Accelerated Traditional Option

Application Requirements

The student must:

1. Be admitted to UALR with regular or conditional admission status and maintain a 2.0 GPA at UALR. Transfer students currently enrolled in other universities at the time of application will be considered for admission into the nursing program if the following documents are on file in the UALR Office of Admissions and Financial Aid:
   • Completed UALR application form
   • Valid ACT or SAT scores, completed high school transcript or GED scores, and official college transcripts through the previous fall semester
   • Required immunization records
2. Obtain application advising from the Department of Nursing prior to submitting an application.
3. Have successfully completed or be eligible to enroll in MATH 1302 and in RHET 1311 or their equivalents. All developmental courses must be completed.
4. Have successfully completed or be enrolled in 4 credit hours of Anatomy and Physiology, either BIOL 1411 Introduction to Human Anatomy and Physiology I, BIOL 1412 Introduction to Human Anatomy and Physiology II, or equivalent. A three hour course will not meet this requirement.
5. Have a minimum GPA of 2.60 in required general education courses (detailed below) and a cumulative UALR GPA of 2.00 or greater. The GPA is based on the courses completed at the time of application.
6. Submit a completed Department of Nursing Application Form between January 1 and February 28. Enclose a copy of all college/university transcripts and scores for credit by examination in required general education courses. The first group of students will be accepted from this pool of applicants. The department continues to accept applications after the February 28th date and will admit additional students based on space availability.
7. Complete scheduled EVOLVE A2 Entrance Examination and request score submission to the department or submit score report with the application.
8. ESL students must have TOEFL scores of 83 (internet exam), 207 (computerized exam) or 540 (paper exam).

Admission Requirements

Students will initially be conditionally admitted to the nursing program. Upon completion of the following, students will be officially admitted to the nursing program:

• Successful completion of NURS 1300
• Submission of required documents by designated date (specified on letter of conditional admission)
• Maintenance of required GPA (required general education course(s) and UALR)
• Attendance at scheduled department orientation session

UALR Undergraduate Catalog 263
Transition Option (LPNs/LPTNs and Qualified Paramedics)

Application Requirements

**LPNs/LPTNs must:**
- Be a graduate of a state board of nursing approved LPN or LPTN program.
- Have a current, unencumbered LPN or LPTN license in the State of Arkansas or a mutual recognition licensure recognized by the Arkansas State Board of Nursing Nurse License Compact.
- Meet advanced placement testing and work experience requirements:
  - Less than 12 months after LPN/LPTN graduation: No testing required for admission to Transition option.
  - Greater than 12 months after LPN/LPTN graduation: No testing required if during past 12 to 24 months have had at least 1000 hours of nursing employment. Employment verification letters must be provided with the application. Students who require advanced placement testing must successfully pass the Excelsior Fundamentals of Nursing Examination.
- Have proof of active employment as an LPN/LPTN over the last 2 years. Volunteer work is not considered active employment. Submit employment verification letter with application.

**Paramedics must:**
- Be a graduate of a paramedic program affiliated with an accredited college or university.
- Hold current certification from the Arkansas Department of Health as an Arkansas Paramedic and be currently registered as a paramedic with the National Registry of EMTs.
- Have proof of active employment as a paramedic for a minimum of 1,000 hours over the last 2 years. Volunteer work is not considered active employment. Submit employment verification letter with application.
- Successfully pass the Excelsior Fundamentals of Nursing Examination.

**LPNs/LPTNs and Paramedics must:**
- Be admitted to UALR with regular or conditional admission status and maintain a minimum GPA of 2.0 at UALR. Transfer students currently enrolled in other universities at the time of application will be considered for admission into the nursing program if the following documents are on file in the UALR Office of Admissions and Financial Aid:
  - Completed UALR application form
  - Valid ACT or SAT scores, completed high school transcript or GED scores, and college transcripts through the previous fall semester
  - Required immunization records
  - Obtain application advising from the Department of Nursing prior to submitting an application.
- Complete the NURS 1415 prerequisite courses or course equivalents with a grade of C or greater. (See NURS 1415 course description in the section that follows).
- Have a minimum GPA of 2.60 on all required general education courses completed at the time the application is made.
- Submit a completed Department of Nursing Application form. Applications must be received in the nursing office in January or February.
- Submit copies of all college transcripts, LPN/LPTN or paramedic transcripts, and proof of current licensure or certification with the application.
- Complete scheduled EVOLVE A2 Entrance Examination and request score submission to the department or submit score report with the application.
- ESL students must have TOEFL scores of 83 (internet exam), 207 (computerized exam) or 540 (paper exam).

Admission Selection Process

Qualified applicants will be selected into the program in the following category order:
1. First time entering freshmen with A2 Evolve scores >70 with 36 or more earned quality points
2. Applicants with A2 Evolve scores >70 with no deductions of quality points
3. Applicants with A2 Evolve scores > 70 with deducted quality points
4. Applicants with A2 Evolve scores <70 with deducted quality points

Applicants are initially ranked by total quality points in required general education courses completed at the time of application. If more than one applicant has the same number of quality points, these applicants are ranked by grade point average (GPA) in the required general education courses. If more than one applicant has the same number of total quality points and the same grade point average, applicants will be randomly ranked.

Quality points are deducted for:
- Academic histories indicating a pattern of course failures
- Repeated required general education courses
- Evolve A2 scores <70

Additional quality points are added for Evolve A2 scores >79

Acceptance into the traditional accelerated option is competitive. Additional information is located at the Department of Nursing website at http://ualr.edu/nursing/.

Qualified applicants who are not initially selected or who submit an application after February 28th will be placed on the waiting list in order of category and quality point totals. Quality points and required general education course grade point averages are recalculated after spring and summer semesters and waiting list rankings are adjusted as indicated. Spaces that become available prior to the beginning of the summer NURS 1300 course will be filled from the waiting list. The waiting list will not carry over to the next year; applicants not selected for admission must reapply each year. Documents submitted as a part of the application process become the property of the Department of Nursing.

Degree Requirements

Traditional Option Course Requirements

**Required General Education (31 credits)**
- RHET 1311 Composition I
- RHET 1312 Composition II
- MATH 1302 College Algebra
- PSYC 2300 Psychology and the Human Experience or SOCI 2300 Introduction to Sociology
- BIOL 1411 Introduction to Human Anatomy and Physiology I
- BIOL 1412 Introduction to Human Anatomy and Physiology II
- BIOL 2401 Microbiology
- HIST 2311 U.S. History to 1877 or HIST 2312 U.S. History since 1877
- or POLS 1310 American National Government
- CHEM 1400 Fundamental Chemistry I

**Required Lower Level Nursing Courses (34 credits)**
- NURS 1300 Essential Nursing Skills
- NURS 1205 Health Promotion Across the Lifespan
- NURS 1505 Nursing Care of Adults I
- NURS 1410 Adult Nursing II
- NURS 1420 Mental Health Nursing
- NURS 2410 Obstetric and Reproductive Health Nursing
- NURS 2420 Pediatric Nursing
- NURS 2550 Adult Nursing III
- NURS 2350 Competency for Entry into Practice
Transition Option Course Requirements

Required General Education (31 credits)

- RHET 1311 Composition I
- RHET 1312 Composition II
- MATH 1302 College Algebra
- PSYC 2300 Psychology and the Human Experience
  or SOCI 2300 Introduction to Sociology
- BIOL 1411 Introduction to Human Anatomy and Physiology I
- BIOL 1412 Introduction to Human Anatomy and Physiology II
- BIOL 2401 Microbiology
- HIST 2311 U.S. History to 1877
  or HIST 2312 U.S. History since 1877
  or POLS 1310 American National Government
- CHEM 1400 Fundamental Chemistry I

Required Lower Level Nursing Courses (24 credits)

- NURS 1415 Nursing Role Transition
- NURS 1420 Mental Health Nursing
- NURS 2410 Obstetric and Reproductive Health Nursing
- NURS 2420 Pediatric Nursing
- NURS 2550 Adult Nursing III
- NURS 2350 Competency for Entry into Practice

Program Progression

Completion of the associate of science degree in nursing requires a minimum grade of C in all nursing courses and required general education courses. Progression in the nursing sequence requires a minimum grade of C in all the nursing courses and their prerequisites/co-requisites. A minimum UALR cumulative grade point average of at least 2.00 on all work attempted at the University must be maintained.

Laboratory Credits

Laboratory credits include one credit for three hours of laboratory time.

Graduation Requirements

- Minimum UALR GPA of 2.0.
- Grade of C or greater in all required general education courses.
- Grade of C or greater in all required lower level nursing courses.

BACHELOR OF SCIENCE IN NURSING PROGRAM

The Bachelor of Science in Nursing (BSN) completion program offers RN graduates, of either an associate of science or a diploma program, an avenue to pursue a BSN. The course work for the BSN completion program builds on the curriculum foundation of the core Registered Nurse program. It is available as an online completion program. The BSN program is accredited by the National League for Nursing Accrediting Commission (NLNAC), 3343 Peachtree Road, NE, Suite 850, Atlanta, GA 30326, (404) 975-5000. Additional information is located at the Department of Nursing website (http://ualr.edu/nursing).

Application/Admission Requirements

Find the application form for the UALR Department of Nursing (DON) BSN program at the website http://ualr.edu/nursing; where additional information is available to complete the application process. Fax a completed and signed UALR DON application form to UALR, DON fax (501) 371-7546.

BSN applicants must:

1. Be admitted or readmitted to UALR.
2. Have a current, unencumbered license as a registered nurse to enroll in 4000 level nursing courses; or be a recent associate degree or diploma graduate to apply and enroll in 3000 level nursing courses; or be a graduate from a basic RN program outside the United States with a current unencumbered USA, RN license; or be enrolled in the final semester of an associate degree or diploma RN program to enroll in NURS 3200-Informatics or NURS 3400-Health Assessment.
3. Have a grade of C or greater in a minimum of 12 credit hours of applicable general education courses beyond the associate of science or diploma.
4. Submit a completed Department of Nursing Application form and copies of all college and nursing transcripts to the DON before advising appointment.

Students who submit completed applications and meet all requirements for entry will be ranked by:

1. Date of complete application submission including completed application form, all required transcripts, and passport photos;
2. Grade Point Average (GPA) in nursing courses.

Students who receive a letter of acceptance may enter the BSN program Spring, Summer, or Fall semester. Priority acceptance will be given to UALR ASN graduate in the ladder program. Students must respond to the acceptance letter and meet with an academic or faculty advisor prior to registration in BSN courses. A degree completion plan will be developed with the student at this time and signed by the advisor and student. Students are expected to adhere to this plan and unavoidable changes can only be made with the advisors prior knowledge and permission. Completed Basic RN Program

General Education Courses (31 credits)

- RHET 1311 Composition I
- RHET 1312 Composition II
- MATH 1315 College Math
  or MATH 1302 College Algebra
- PSYC 2300 Psychology and the Human Experience
  or SOCI 2300 Sociology
- BIOL 1411 Anatomy and Physiology I
- BIOL 1412 Anatomy and Physiology II
- BIOL 2401 Microbiology
- HIST 2311 US History to 1877
  or HIST 2312 US History since 1877
  or POLS 1310 American National Government
- CHEM 1400 Fund of Chemistry I or higher

Lower-Level Nursing Credits for RN Licensure (32 credits)
BSN Completion Curriculum

Required General Education Courses (26 credits)

One of the following if not taken with the basic RN program (Social Science Core)*:
- PSYC 2300 Psychology and the Human Experience
- SOC 2300 Introduction to Sociology

One of the following (Social Science Core*):
- HIST 1311 History of Civ I
- HIST 1312 History of Civ II

One of the following (Humanities Core)*:
- ENGL 2327 World Literature
- ENGL 2338 World Literature Themes
- PHIL 2320 Ethics and Society

One of the following (Fine Arts core)*:
- MUHL 2305 Introduction to Music
- ARHA 2305 Introduction to Visual Art
- THEA 2305 Introduction to Theatre and Dance

One of the following:
- PSYC 2310 General Psychological Statistics
- PSYC 2340 Statistics and Methods I
- SOCI 3381/3181 Social Statistics
- STAT 2350 Intro to Statistical Methods

One of the following:
- RHET 3316 Writing for the Workplace
  or RHET 3326 Technical Writing

Upper Level Elective (8 Credits)*

Required Upper-Level Nursing Courses (34 credits)

NURS 3400 Health Assessment
NURS 3310 Professional Nursing Role Development
NURS 3320 Wellness Promotion and the Nurse Educator
NURS 3330 Health Care Economics
NURS 3340 Research and Evidence Based Practice
NURS 3350 Ethics, Legalities, and Advocacy
NURS 4510 Nursing Practice: Community Health Needs
NURS 4520 Nursing Practice: Leadership and Management
NURS 4530 Nursing Practice: Integration of Concepts

A minimum UALR cumulative grade point average of at least 2.00 on all work attempted at the University must be maintained. The program must be completed in five years from the date of initial enrollment in NURS 3310.

Program Progression

Completion of the baccalaureate of science degree in nursing requires a minimum grade of C in all upper level nursing courses and required general education courses. Students who do not successfully complete NURS 3310 may not enroll in additional upper level nursing courses until a passing grade in NURS 3310 is earned. Progression in the nursing sequence requires a minimum grade of C in all the nursing courses and their prerequisites/corequisites. Students must also maintain unencumbered RN licensure, maintain required nursing program documents and forms, and demonstrate professional conduct in the student role.

Practicum Credits

Practicum credits include one credit hour for three hours of practicum time.

Graduation Requirements

- Minimum UALR GPA of 2.0.
- Grade of C or greater in all required general education courses.
- Grade of C or greater in all required upper level nursing courses.

Courses in Nursing (NURS)

Lower-Level Courses in Nursing (NURS)

NURS 1201 Medication Calculations for Nursing
An elective web-based course designed to provide nursing students with an understanding of medication calculations; Provides framework for understanding calculation of medication dosages by presenting terms, symbols, forms and methods commonly practiced by healthcare providers. Two credit hours.

NURS 1300 Essential Nursing Skills
Prerequisites: Conditional admission to the nursing program. An introduction for nursing students to essential psychomotor skills and professional behaviors required for the safe practice of nursing. Emphasis is on skill mastery. Three credit hours. (2 credits theory; 1 credit lab)

NURS 1301 Medical Terminology for Nursing
An elective web-based course designed to provide an understanding of medical terminology; Provides the framework for understanding medical records by presenting terms, abbreviations, symbols, forms and formats commonly used by healthcare providers. Three credit hours.

NURS 1205 Health Promotion Across the Lifespan
Prerequisite: Unconditional admission to the nursing program; Pre- or Corequisite: NURS 1505 and BIOL 1412. The course introduces the knowledge, skills, and attitudes as they relate to the concept of Health across the lifespan. Emphasis is on nurses’ role in health risk reduction; learning needs assessment; accessing current evidence of practices to improve quality of life; collaborating with peers to develop patient centered risk assessments; and teaching plans to promote health in all life stages for individuals and families. Two credit hours.
NURS 1415 Nursing Role Transition
Prerequisites: BIOL 1411, 1412; MATH 1302; PSYC 2300 or SOCI 2300; RHET 1311, 1312; and one of the following: HIST 2311, 2312, or POLS 1310; CHEM 1400 or higher; BIOL 2401 or equivalent. The course introduces LPNs, LPTNs, and paramedics to the knowledge, skills, and attitudes required for the registered nurse in patient centered care, teamwork and collaboration, evidence based practice, safety, quality improvement, and informatics. The concept of health will be explored through collaboration with peers to develop a patient centered risk assessment and teaching plan to promote health across the lifespan. Verification of mastery of essential psychomotor skills will be confirmed through completion of simulation activities. Web-based course with scheduled, mandatory class meetings. Four credit hours.

NURS 1505 Adult Nursing I
Prerequisite: Unconditional admission to the nursing program. Pre or Corequisite: NURS 1205, BIOL 1412. An introduction to the nurse’s role in the delivery of patient centered care as a member of a multidisciplinary team with an emphasis on the growth and development in older adulthood, fundamental nursing assessment and interventions to promote functioning and comfort. Introduction to cultural considerations, pharmacology, physical and environmental safety, evidence based practice, legal/ethical principles, quality improvement, and informatics is incorporated through exemplars of chronic health problems and physical changes requiring acute or long term management. Learning activities include class and laboratory experiences in simulation, acute care, long-term care, and community settings. Five credit hours (3 credits theory; 2 credits lab).

NURS 1410 Adult Nursing II
Prerequisites: NURS 1205, NURS 1505, BIOL 1412. Builds on NURS 1505 with focus on coordination of patient centered care and the evidence base for planning priorities based on the health problem, symptoms, and patient/family beliefs and values. Exemplars include acute and chronic health problems common in middle adulthood that require multidisciplinary management. Students continue to develop nursing knowledge, skills, and attitudes in the competencies of safety, teamwork and collaboration, quality improvement, and informatics with laboratory experiences in simulation, structured health care settings, and completion of a service learning activity. One-half semester. Four credit hours (2 credits theory; 2 credits lab).

NURS 1420 Mental Health Nursing
Prerequisites for Traditional Option: NURS 1205, NURS 1505, BIOL 1412; prerequisites for Transition Option: NURS 1415. Builds on NURS 1505 with a focus on mental health/illness across the lifespan and communication with patients, families, and the health care team, including principles of conflict management. Exemplars include psychosocial assessment in acute and chronic mental illness, symptom management, and patient advocacy. Students continue to develop nursing knowledge, skills, and attitudes in the competencies of safety, quality improvement, and informatics through learning experiences in the classroom, acute care/community mental health facilities. Traditional option: One-half semester; Transition option: Summer term. Four credit hours (2 credits theory; 2 credits lab).

NURS 2199, 2299, 2399 Special Topics in Nursing
Prerequisites: NURS 1410 or NURS 1415, NURS 1420. An elective course that provides opportunity for second year nursing students to use clinical decision making and evidence based practice to explore and coordinate projects of their choosing as a health care professional in community and service learning settings. One, two, or three credit hours.

NURS 2201 Pharmacology for Nurses
Prerequisites: NURS 1505 or NURS 1415. An elective web-based nursing course presenting the essential concepts of pharmacology. Designed to promote clinical decision making and the integration of pharmacological concepts to meet health needs of individuals across the lifespan. Two credit hours.

NURS 2202 Diagnostic Studies in Nursing
Prerequisites: NURS 1505 or NURS 1415. An elective web-based nursing course presenting common laboratory and diagnostic tests and procedures commonly used in the diagnosis and treatment of common health problems. Designed to promote clinical decision making in patient preparation and education for procedures. Two credit hours.

NURS 2410 Obstetric and Reproductive Health Nursing
Prerequisites: NURS 1410 or NURS 1415, NURS 1420, and MATH 1302. Pre or Corequisite: CHEM 1400. A study of the current evidence base for patient centered care during the reproductive years, with emphasis on normal child-bearing processes. Exemplars illustrating expected processes and common problems that occur during childbearing will be used to facilitate students’ application of decision making skills to prioritize care as a member of the multidisciplinary team. Students will provide patient/family discharge teaching and implement an original community teaching project to further develop skills in quality improvement and informatics. Laboratory experiences will take place in simulation, acute care and community settings. Traditional option: One-half semester; Traditional Accelerated option: Summer term. Four credit hours (2 credits theory; 2 credits lab).

NURS 2420 Pediatric Nursing
Prerequisites: NURS 1410 or NURS 1415, NURS 1420, and MATH 1302. Pre or Corequisite: CHEM 1400. A study of the growth and development of infancy through adolescence within the family context. Common acute and chronic health problems that occur during childhood will be incorporated through exemplars in which students must examine the current evidence base and prioritize care as a member of the multidisciplinary team. Students will collaborate in the development of a planned change related to safety needs across developmental stages in a variety of settings. Knowledge and skills related to quality improvement and informatics as they relate to care of children will continue to develop through classroom and laboratory experiences. Laboratory experiences will take place in simulation, acute care and community settings. Traditional option: One-half semester; Traditional Accelerated option: Summer term. Four credit hours (2 credits theory; 2 credits lab).

NURS 2550 Adult Nursing III
Prerequisites: NURS 2410, NURS 2420, CHEM 1400. Pre or corequisite: BIOL 2401. The focus of this course is to further develop the knowledge, skills, and attitudes related to clinical decision making in the delivery of nursing care to adults. Complex health problems will be incorporated through exemplars in which students must prioritize care as a member of the multidisciplinary team. Laboratory experiences will include simulation and managing care for groups of patients and providing leadership within the nursing team, with emphasis on provision of evidence based, patient centered care in acute care settings. Competencies of safety, quality improvement, and informatics will be incorporated in laboratory experiences. Ten weeks. Five credit hours (3 credits theory; 2 credits lab).

NURS 2350 Competency for Entry into Practice
Prerequisites: NURS 2550, CHEM 1400. Pre or corequisite: BIOL 2401. The focus of this course is to support transition to the practice of nursing through synthesis of knowledge. Students will demonstrate the knowledge, skills, and attitudes in the competencies of patient centered care, evidence based practice, teamwork and collaboration, safety, quality improvement, and informatics. The competencies will be demonstrated within a structured preceptor supervised practicum, and during a practical management experience. Comprehensive review will support student readiness for the NCLEX-RN examination. Five weeks. Three credit hours (2 credits theory; 1 credit lab).
Upper-Level Courses in Nursing (NURS)

NURS 3200 Informatics in Nursing (Elective)
Corequisite: NURS 2550 or consent of Department Chairperson. This course focuses on knowledge, skills, and attitudes associated with accessing, managing, and communicating information, particularly on the creation, structure, and delivery of health related information with the use of technology. Further emphasis is on the use of information technology to improve practice and support life-long learning. Two credit hours.

NURS 3400 Health Assessment
Prerequisite: RN or enrolled in the final semester of a National League for Nursing Accreditation Commission (NLNAC) approved associate degree or diploma program with approval of department chairperson. This course provides the knowledge, skills, and attitudes for assessment of the patient across the lifespan. Focus is on the role of the professional nurse in performing a competent, comprehensive health history, physical, and psychosocial assessment using specific assessment tools. Further focus is on data collection and accurate documentation to communicate findings to the health care team. Four credit hours.

NURS 3310 Professional Nursing Role Development
Prerequisite to all other required upper level nursing courses except Nursing 3400. The course focus is on the process of socialization into nursing as a profession. The process explores the impact of historical and current events in the development of the professional role of the nurse. Knowledge, skills, and attitudes related to QSEN competencies (EBP, T/C, QI, S, PCC, and I) in professional nursing and the BSN curriculum is included. A personal philosophy of nursing will be explored within the framework of various nursing theories. One half semester. Three credit hours.

NURS 3320 Wellness Promotion and the Nurse Educator
Provides an overview of knowledge, skills, and attitudes inherent in the nurse’s role as educator. Emphasis is on principles of teaching and learning in diverse populations to implement evidence based practices to improve outcomes. Assessment of learning needs of patients and communities will be explored. The course will culminate with students designing and implementing a teaching project as an avenue for nurses to advance health. One half semester. Three credit hours.

NURS 3330 Health Care Economics
This course focuses on knowledge, skills, and attitudes that relate to factors affecting costs of health care. Students will research cost/benefit analyses related to quality outcomes in the business of health care. Current local, state and national health policy issues as they relate to patient centered care will be discussed from a nursing perspective. One half semester. Three credit hours.

NURS 3340 Research and Evidenced-Based Practice in Nursing
Prerequisite: Approved statistics course. This course provides an overview of scientific evidence integrated into nursing practice. The focus is on knowledge, skills and attitudes required for the research process, including evaluation and dissemination of best practices to improve health care outcomes. Further emphasis is on the significance of research as it contributes to the profession of nursing. One half semester. Three credit hours.

NURS 3350 Ethics, Legalities, and Advocacy
This course explores various ethical guidelines that inform and guide the decision making of nurses, including the framework of the American Nurses Association Code of Ethics. Emphasis is on the knowledge, skills, and attitudes included in the legal and ethical responsibilities of nurses in all aspects of care. Patient-centered care is explored from the perspective of advocating for the patient within the interdisciplinary team. One half semester. Three credit hours.

NURS 4510 Nursing Practice: Community Health Needs
This course provides an introduction to knowledge, skills, and attitudes for community health nursing including issues related to public health and concepts of epidemiology. Emphasis is on health promotion and illness prevention or disease management of specified groups. Practicum focus is on the professional nurse’s role in community assessment and development of an interventional project to meet identified community needs. Five credit hours (3 credits theory; 2 credits practicum).

NURS 4520 Nursing Practice: Leadership and Management
This course provides the opportunity to develop knowledge, skills and attitudes required for leadership and management in nursing. Leadership, organizational management and change theories are examined, with emphasis on conflict management, workplace diversity, resource allocation, quality and performance. The practicum is designed to provide experiences to expand the application of leadership and management skills. Five credit hours (3 credits theory; 2 credits practicum).

NURS 4530 Nursing Practice: Integration of Concepts
Final required upper level nursing course. This course focuses on an analysis of cumulative nursing knowledge, skills, and attitudes necessary to practice in an evolving health care system. Practicum focus is on individual professional role development, integration of previous learning into one’s own nursing practice, and knowledge dissemination to advance nursing. The course culminates in the presentation of a comprehensive e-portfolio. Five credit hours (3 credits theory; 2 credits practicum).
The department offers two degrees:
1. Bachelor of Science
2. Bachelor of Arts.

The Bachelor of Science degree prepares students for admission to graduate work in physics or astronomy. Students desiring a career in astronomy normally major in physics.

The Bachelor of Arts degree is for students who plan to specialize in graduate school without sacrificing the advantages of a liberal arts undergraduate education. This degree is also suitable for premedical students and others who do not plan professional careers in physics, including those students pursuing a career in secondary education. Minors are also offered in physics and astronomy.

The department uses specialized equipment, including a 12-inch computer-controlled telescope with an electronic camera. A survey of galaxies gives students the opportunity to work with real infrared imaging data and to use software employed at the National Optical Astronomy Observatories and the Hubble Space Telescope.

General Information

The department has active research programs in astronomy, astrophysics, condensed matter physics, material science, nanoscience and nanotechnology, optics, and solid state physics. Recently the department has been building up research facilities for condensed matter physics, solid state, and nanoscience and nanotechnologies research. A state funded nanotechnology research center also provides state of the art research facilities on campus for research in these areas.

The department encourages the involvement of undergraduates in research. In recent years undergraduates have participated in research at Kitt Peak National Observatory, Steward Observatory, Lawrence Berkeley National Laboratory, Fermi National Accelerator Laboratory, Brookhaven National Laboratory, and research laboratories at the Department of Physics and Astronomy at UALR. This has helped undergraduates in this program to become nationally competitive for research awards and for jobs that require the application of modern technology.

The department’s planetarium, one of the largest in the state, has an automated projector in a 40-foot dome with extensive auxiliary projectors and a high-quality sound system. A 17-inch heliostat is used to project an image of the sun on the planetarium dome.

The department sponsors an active chapter of the Society of Physics Students and Sigma Pi Sigma, the physics honor society. Anyone interested in physics is invited to join the chapter.

Admission Requirements

Students interested in majoring in physics should contact the chairperson of the Department of Physics and Astronomy to declare a major and be assigned an advisor to help plan a schedule that will permit graduation in a timely manner. Students interested in majoring in physics are encouraged to discuss curricula and possible career opportunities with members of the physics and astronomy faculty before the end of the freshman year.

Students should take Calculus I (MATH 1451), a prerequisite for Physics for Scientists and Engineers I, early in their academic career. Entering students with preparation in calculus may enroll in Physics for Scientists and Engineers I in the first semester of the freshman year. Most upper-level physics courses require Calculus III (MATH 2453) as a prerequisite. Decisions regarding the equivalency of courses and situations in which students have tested out of courses will be made by the chairperson of the Department of Physics and Astronomy.

Students considering high school physics teaching should follow the secondary education option in the Bachelor of Arts curriculum. They should consult the College of Education for information about education courses and programs.

Honors Program in Physics

The department offers an honors program to provide qualified students the opportunity to pursue advanced study and receive appropriate recognition. This program is distinct from graduation with honors and does not replace it. Interested students may apply for admission to this program after they have completed Physics for Scientists and Engineers I and II.

Participants in the honors program are selected by the department faculty during the junior year, usually before the second semester. Minimum requirements for admission into the program are a 3.25 grade point average overall and a 3.50 grade point average in all physics courses. These averages must be maintained for continued participation in the program.
Honors students must take at least four hours of independent study or undergraduate research related to a project in addition to the usual requirements for graduation. The study will be on an advanced topic and will involve research covering two to four semesters. The topic must be approved by the department chairperson, who will assign a faculty member to supervise the study. On successful completion of the project, the student must present the results of the study to an appropriate scientific body and submit a thesis, approved by the faculty supervisor, to the department chairperson.

Degree Requirements

The Bachelor of Science with a major in physics requires 36 credit hours including at least 28 credit hours of upper-level physics courses.

BACHELOR OF SCIENCE IN PHYSICS
(120 HOURS)

Core Curriculum (44 hours)

Required courses (30 hours)
PHYS 2321 Physics for Scientists and Engineers I
PHYS 2121 Physics for Scientists and Engineers I Laboratory
PHYS 2322 Physics for Scientists and Engineers II
PHYS 2122 Physics for Scientists and Engineers II Laboratory
PHYS 3323 Physics for Scientists and Engineers III
PHYS 3123 Physics for Scientists and Engineers III Laboratory
PHYS 3350 Electronics
PHYS 4111 Advanced Laboratory I
PHYS 4112 Advanced Laboratory II
PHYS 4310 Statistical Thermodynamics
PHYS 4311 Classical Mechanics
PHYS 4321 Electromagnetism I
PHYS 4350 Quantum Mechanics
PHYS 4190 Seminar

Plus any 6 hours from the courses below:
PHYS 3330 Medical Physics
PHYS 4340 Solid State Physics
PHYS 4380 Wave Motion and Optics
PHYS 4330 Mathematical Methods in the Physical Sciences

BACHELOR OF ARTS IN PHYSICS
(120 HOURS)

Core Requirements (44 hours)

Second Language Proficiency

Core courses:
PHYS 2321 Physics for Scientists and Engineers I
PHYS 2121 Physics for Scientists and Engineers I Laboratory
PHYS 2322 Physics for Scientists and Engineers II
PHYS 2122 Physics for Scientists and Engineers II Laboratory
PHYS 3323 Physics for Scientists and Engineers III
PHYS 3123 Physics for Scientists and Engineers III Laboratory
PHYS 4111, 4112 Advanced Laboratory I
PHYS 4190 Seminar

Physics option:
PHYS 4311 Classical Mechanics
PHYS 4321 Electromagnetism I

Plus seven additional credit hours of upper level physics courses.

Secondary education option:

PHYS 3350 Electronics
PHYS 3315 Teaching Physics in the Secondary School
IGSC 4401 Integrated Science Methods
MATH 1451 Calculus I
MATH 1452 Calculus II
MATH 2453 Calculus III
ERSC 1302 Physical Geology
ERSC 1102 Physical Geology Laboratory
ERSC 1303 Historical Geology
ERSC 1103 Historical Geology Laboratory
ERSC 3310 Mineralogy
or ERSC 3320 Field Geology I
CHEM 1402 General Chemistry I
CHEM 1403 General Chemistry II
CHEM 2310 Analytical Chemistry I
CHEM 2311 Analytical Chemistry II

One course (3 hours) from:
ERSC 4411 Petrology
ERSC 3430 Structural Geology
ERSC 3450 Sedimentology and Stratigraphy
ERSC 3360 Paleobiology
ERSC 3372 Surficial Hydrology

One course (4 hours) from:
ERSC 4480 Earth Systems I
ERSC 4481 Earth Systems II
CHEM 3350 General Organic Chemistry I
CHEM 3150 Organic Chemistry Laboratory I
CHEM 3351 General Organic Chemistry II
CHEM 3151 Organic Chemistry Laboratory II

Students must complete a minor in secondary education consisting of 18 hours of courses in the College of Education. See “Secondary Teacher Licensure” on page 48 for information about these courses.

Minor in Astronomy

A minor in astronomy requires at least 19 credit hours of astronomy and physics courses. An additional three upper level hours of physics or astronomy courses are required.

Required courses:

PHYS 2321 Physics for Scientists and Engineers I
PHYS 2322 Physics for Scientists and Engineers II
PHYS 2121 Physics for Scientists and Engineers I Laboratory
PHYS 2122 Physics for Scientists and Engineers II Laboratory
PHYS 4190 Seminar

Physics option:
PHYS 4311 Classical Mechanics
PHYS 4321 Electromagnetism I

Plus seven additional credit hours of upper level physics courses.
Minor in Physics

A minor in physics requires at least 18 credit hours of physics courses. At least 10 credit hours of upper-level courses are required.

Required courses:

- PHYS 2321 Physics for Scientists and Engineers I
- PHYS 2121 Physics for Scientists and Engineers I Laboratory
- PHYS 2322 Physics for Scientists and Engineers II
- PHYS 2122 Physics for Scientists and Engineers II Laboratory
- PHYS 3323 Physics for Scientists and Engineers III
- PHYS 4111 Advanced Laboratory I
  or PHYS 4112 Advanced Laboratory II

Plus any 6 hours from the below courses:

- PHYS 3350 Electronics
- PHYS 3330 Medical Physics
- PHYS 4310 Statistical Thermodynamics
- PHYS 4311 Mechanics I
- PHYS 4321 Electromagnetism I
- PHYS 4330 Mathematical Methods in the Physical Sciences
- PHYS 4340 Solid State Physics
- PHYS 4350 Quantum Mechanics
- PHYS 4380 Wave Motion and Optics

Courses in Astronomy (ASTR)

ASTR 1100 Observational Astronomy

An introduction to telescopes, the apparent movements of the sun, and constellations. Special facilities include the 12-inch computer-controlled telescope with electronic camera and the Planetarium. The course includes lectures, discussions, demonstrations, and laboratory experiments. Offered nights only. One credit hour.

ASTR 1101 Introduction to Astronomy Laboratory

Prerequisite or corequisite: ASTR 1301 or 1311. A laboratory course designed to accompany ASTR 1301. A variety of activities in data acquisition and analysis which tie concepts discussed in the classroom to real-world experiences. Open laboratory, the planetarium, and observatory activities. One credit hour.

ASTR 1301 Introduction to Astronomy

Study of the process of science by which knowledge about our place in the cosmos is obtained. Examples of possible observations and the inferences drawn from them. Emphasis on how we obtain our knowledge and the certainty of various parts of it. A core curriculum course. Three credit hours.

ASTR 2300 Intermediate Astronomy

MATH 0301 required. ASTR 1301 recommended. An Allegra-based astronomy course, with an emphasis on applying the tools of physics to understand the processes inherent in galaxies, cosmology and the structure and evolution of stars. Three hours lecture per week. Spring only.

ASTR 3301 Astronomical Techniques

Prerequisite: PHYS 2322. ASTR 2300 recommended but not required. A thorough introduction to the techniques of observational astronomy, starting with the basics of positional astronomy and systems of time. Includes discussions on the basics of light and effects of the atmosphere on astronomical observations, optical telescopes, detectors (including CCDs), photometry, astrometry, spectroscopy, and statistical methods. Three credit hours.

ASTR 3401 Scientific Computing and Image Processing in Astronomy

Students work in a scientific computing environment using the UNIX/Linux operating system. Professional image processing software is used to analyze astronomical images from real data. Extensive use is made of internet resources. An integrated self-paced course equivalent to three lecture hours and two laboratory hours per week. Four credit hours.

ASTR 4301 Astrophysics

PHYS 2322 required. ASTR 2300 recommended, but not required. An upper level course in astrophysics, with an emphasis on applying the tools of mechanics, electromagnetism, thermodynamics, and quantum theory to understand the processes inherent in galaxies, cosmology and the structure and evolution of stars. This course is dual listed in the graduate catalog as ASTR 5301. Three hours lecture per week. Three credit hours. Spring only.

Courses in Physics (PHYS)

PHYS 1300 Physics and Society

A general education course with no mathematics prerequisite designed for the non-science major but open to all students. It considers the relationship of physics and astronomy to various aspects of societal problems. Not part of the core curriculum. Three hours lecture. Three credit hours.

PHYS 1100 Physics and Society Laboratory

Prerequisite or corequisite: PHYS 1300. Designed to examine some experimental aspects of topics discussed in PHYS 1300. Two hours laboratory. One credit hour.

PHYS 1310 Physical Concepts

Prerequisite: MATH 0301 or equivalent. A one-semester course for students in programs of the health related professions. An introduction to the concepts of mechanics, properties of matter, heat, sound, electricity and magnetism, light, and atomic and nuclear physics. Three hours lecture. Three credit hours.

PHYS 1110 Physical Concepts Laboratory

Corequisite or prerequisite: PHYS 1310. Designed to examine some experimental aspects of topics discussed in PHYS 1310. Two hours laboratory. One credit hour.

PHYS 1311 Introduction to Physics

A one-semester survey of the major topics of physics, designed for the student who plans to take PHYS 1321 or 2321 but has not had high school physics or the equivalent. Does not meet the laboratory science requirement. Three hours lecture. Three credit hours.

PHYS 1320 Musical Acoustics

An introduction to the acoustical foundations of music and speech. Covers the generation and analysis of tones produced by the various musical instruments and the voice, acoustic. Three credit hours.

PHYS 1120 Musical Acoustics Laboratory

Prerequisite or corequisite: PHYS 1320. Laboratory facilities are available for determining the pitch of musical sounds; filtering music; speech; sine, square, and triangular waves; analyzing the spectrum of sounds; determining one’s threshold of hearing; electronic synthesis of sounds; studying noise pollution; and measuring reverberation time. Two hours laboratory. One credit hour.

PHYS 1321 Elementary Physics I

Prerequisite: MATH 0301 or equivalent, high school physics or PHYS 1311 or equivalent, or consent of instructor. Introduction to the fundamental principles underlying the foundations of classical and modern physics. An algebra-based course designed for majors in the life sciences, pre-professional students, and engineering technology students but is open to any student who meets the prerequisites. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 1121 Elementary Physics I Laboratory

Prerequisite or corequisite: PHYS 1321. Two hours laboratory. One credit hour.

PHYS 1322 Elementary Physics II

Prerequisite: PHYS 1321. Continuation of PHYS 1321. Three hours lecture, one hour optional discussion. Three credit hours.
PHYS 1122 Elementary Physics II Laboratory
Prerequisite or corequisite: PHYS 1322. Two hours laboratory. One credit hour.

PHYS 1381 Applied Physics I
Prerequisite: MATH 0301 or equivalent. Introduction to the fundamental principles underlying the foundation of classical physics and the application of those principles to technical problems. A non-calculus course designed for students in technical areas, such as engineering technology or architecture. Open to any student who meets the prerequisites. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 1181 Applied Physics I Laboratory
Prerequisite or corequisite: PHYS 1381. Two hours laboratory. One credit hour.

PHYS 1382 Applied Physics II
Prerequisites: PHYS 1381, 1181. A continuation of PHYS 1381 with applications in electricity and magnetism, optics, and modern physics. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 1182 Applied Physics II Laboratory
Prerequisite or corequisite: PHYS 1382. Two hours laboratory. One credit hour.

PHYS 2321 Physics for Scientists and Engineers I
Prerequisite: MATH 1304 or 1451. A calculus-based introduction to the fundamental principles underlying classical physics and modern physics and the applications of those principles in science and engineering. Three hours of lecture and one hour optional discussion. Three credit hours.

PHYS 2121 Physics for Scientists and Engineers I Laboratory
Prerequisite or corequisite: PHYS 2321. Two hours laboratory. One credit hour.

PHYS 2322 Physics for Scientists and Engineers II
Prerequisites: PHYS 2321 and MATH 1305 or 1452. Continuation of PHYS 2321 for students majoring in physics, astronomy, chemistry, computer science, engineering, geology, information science, mathematics, and systems engineering. Topics include electricity, magnetism, optics, relativity, and quantum physics. Three hours of lecture and one hour optional discussion. Three credit hours.

PHYS 2122 Physics for Scientists and Engineers II Laboratory
Prerequisite or corequisite: PHYS 2322. Two hours laboratory. One credit hour.

PHYS 2391 Cooperative Education Work Experience I
Prerequisite: consent of department chairperson. Corequisites: PHYS 1321, 1121 or PHYS 2321, 2121. Designed to enhance college education through career exploration in astronomy, engineering physics, or physics. A minimum of nine hours work per week. Exact number of hours will depend on the nature of the work experience and will be specified by a contract. Three credit hours.

PHYS 3123 Physics for Scientists and Engineers III Laboratory
Prerequisite or corequisite: PHYS 3323. Three hours laboratory. One credit hour.

PHYS 3260 Laboratory Techniques in Nuclear Physics
Prerequisite: PHYS 2322. An introduction to the equipment and laboratory techniques of experimental physics: accelerators, vacuum systems, particle optics and kinematics, detection and analysis of nuclear radiations, and electronic instrumentation. Two hours lecture, one hour optional discussion. Two credit hours.

PHYS 3315 Teaching Physics in the Secondary School
Prerequisite: consent of instructor. A study of physics laboratory experiments and demonstrations available for secondary school physics courses. Three hours lecture. Three credit hours.

PHYS 3320 Physics of the Earth
Prerequisites: PHYS 2322; CHEM 1401 or 1403. Fundamental problems in solid earth geophysics: precession, wobble, and tidal friction; seismology and the internal structure of the earth; origin of the geomagnetic field; physical properties of mantle materials; and radioactivity and the age of the earth. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 3323 Physics for Scientists and Engineers III
Prerequisites: PHYS 2322 or 1322 and MATH 2306, 1452 or 2453. A continuation of topics in relativity and quantum physics introduced in PHYS 2322 or 1322 for students majoring in physics, astronomy, chemistry, computer science, engineering, geology, information science, mathematics, and systems engineering. Three hours of lecture and one hour optional discussion. Three credit hours.

PHYS 3330 Medical Physics
Prerequisites: PHYS 1321, 1322 or 2321, 2322. The applications of the concepts, methods, and principles of physics to the diagnosis and treatment of human disease. Three hours lecture. Three credit hours.

PHYS 3130 Medical Physics Laboratory
Prerequisite or corequisite: PHYS 3330. Approximately 18 hours of hospital time supplemented by laboratory work in the Physics Department. Three hours laboratory. One credit hour.

PHYS 3350 Electronics
Prerequisites: PHYS 2322, or 1322 and consent of the instructor. An introduction to digital circuit concepts and basic systems. Digital measurements, switching concepts and logic, flip-flops and multivibrators, counters and registers, digital and analog digital systems. Nine hours laboratory. Three credit hours.

PHYS 3380 Astronautics
Prerequisites: PHYS 2321, 2121, ASTR 1301, 1101. The development of astronautics with emphasis on the extension of aviation into aerospace and the impact of the space age on our society and culture. An introduction to the fundamentals of rocket and space vehicle development, propulsion, dynamics, transfer orbits, and space navigation. Three hours lecture. Three credit hours.

PHYS 3391 Cooperative Education Work Experience II
Prerequisites: major in physics, junior standing, and consent of department chairperson. Further work experiences to enhance college education through an internship in astronomy, engineering physics, or physics. A minimum of nine hours work per week. The exact number of hours will depend on the nature of the work experience and will be specified by a contract. Three credit hours.

PHYS 4190 Seminar
Presentation of selected papers by students, faculty members, and invited speakers at weekly departmental meetings. Discussions, analysis, and implications of theoretical and experimental studies in the physical sciences. One hour. One credit hour.

PHYS 4111, 4112 Advanced Laboratory I
Prerequisite: consent of instructor. Advanced experiments to acquaint the student with the problems and techniques of research activities. Equipment such as a 12-inch computer-controlled telescope with electronic camera, a 17-inch heliostat, and audio spectrum analyzers are available for student use. The advanced laboratory exposes the student to modern research techniques and provides many traditional laboratory experiences. Three to six hours of laboratory. One or two credit hours.

PHYS 4112, 4212 Advanced Laboratory II
Prerequisite: PHYS 4111 or 4112. Continuation of PHYS 4111 or 4112. Three to six hours laboratory. One or two credit hours.

PHYS 4100, 4200, 4300 Independent Study
Prerequisite: consent of chairperson. Individual research by the advanced student. Topics determined on the basis of faculty interests and availability. One to three hours per credit hour. Exact time and nature of the experience will depend on the particular subject of the independent study and will be agreed on at the beginning of the term by the student and the instructor. One, two, or three credit hours.
PHYS 4310 Statistical Thermodynamics  
Prerequisites: PHYS 2322, 3323. A microscopic, unified approach to thermodynamics and statistical mechanics with applications to ideal gases, including blackbody radiation and conduction electrons, magnetic systems, the Debye model, and chemical and phase equilibria. Dual-listed in the UALR Graduate Catalog as PHYS 5310. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4311 Classical Mechanics  
Prerequisites: PHYS 2321, MATH 2306 or 1452, or consent of the instructor. Concepts of Newtonian mechanics, dynamics of particles and systems of particles, gravitation, vector analysis, dynamics of rigid bodies, moving coordinate systems, continuous media, small oscillations, and the methods of Lagrange and Hamilton. Dual-listed in the UALR Graduate Catalog as PHYS 5311. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4321 Electromagnetism I  
Prerequisite: PHYS 2322. Includes the Coulomb and Gauss laws, the Poisson and Laplace equations and solutions in several coordinate systems, electric and magnetic energy, AC and DC circuits, Ampere’s and Faraday’s laws, the vector potential, Maxwell’s equations, and the propagation of electromagnetic waves. Dual-listed in the UALR Graduate Catalog as PHYS 5321. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4322 Electromagnetism II  
Prerequisite: PHYS 4321. Continuation of PHYS 4321. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4330 Mathematical Methods in the Physical Sciences  
Prerequisite: MATH 2306 or 1452. Review of vector calculus, differential equations and solutions, probability, error theory, partial differentiation, and functions of a complex variable. Dual-listed in the UALR Graduate Catalog as PHYS 5330. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4331 Modern Physics I  
A more detailed treatment of the topics of PHYS 3323. Relativity, quantum mechanics, statistical physics, atomic and nuclear physics, and elementary particles. Dual-listed in the UALR Graduate Catalog as PHYS 5331. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4332 Modern Physics II  
Prerequisite: PHYS 4331. Continuation of PHYS 4331. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4340 Solid State Physics  
Prerequisite: PHYS 3323. Structure of crystals, dispersion relations, specific heat, phonons, electric and magnetic properties of insulators and metals, band theory of metals, insulators and semiconductors, superconductivity. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4350 Quantum Mechanics I  
Prerequisite: PHYS 3323. Concepts and history of quantum mechanics, experimental basis, the uncertainty principle, the Schroedinger equation with applications to simple systems, the hydrogen atom, perturbation theory, the interpretations of quantum mechanics, symmetry principles. Dual-listed in the UALR Graduate Catalog as PHYS 5350. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4360 High Energy and Nuclear Physics  
Prerequisite: PHYS 3323. Properties of the nuclei, nuclear structure and stability, quark-gluon structure of hadrons, thermodynamics of large ensembles of hadrons, nuclear reactions, instrumentation and accelerators. Dual-listed in the UALR Graduate Catalog as PHYS 5360. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4370 Advanced Theoretical Physics  
Prerequisite: consent of instructor. Topics vary with the experience and interests of students. Some possible topics are scattering of waves, plasma physics, atmospheric physics, fluid dynamics, and quantum optics. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4375 Planetarium Management  
Prerequisites: ASTR 1301, 1101, consent of instructor. Administration, supervision, and management of planetariums in schools, colleges, museums, and other situations, involving such topics as role and scope, personnel, budgets, publicity, planning, and use of planetariums in the contemporary scene. Especially recommended for those planning to enter into a planetarium career. Three hours lecture. Three credit hours.

PHYS 4376 Planetarium Technology  
Prerequisites: ASTR 1301, 1101, consent of instructor. Production and presentation of programs at all levels using the Planetarium and its auxiliary equipment. Special emphasis on planetarium astronomy, programming, operations, maintenance of equipment, and the technical aspects of the planetarium field. Especially recommended for those planning to enter into a planetarium career. Three hours lecture. Three credit hours.

PHYS 4380 Wave Motion and Optics  
Prerequisite: PHYS 2322. The wave equation and solutions, wave propagation, coherence, interference, diffraction, polarization, refraction and reflection, dispersion, the interactions of light with matter, Huygens’ principle, optical instruments, quantum optics. Dual-listed in the UALR Graduate Catalog as PHYS 5380. Three hours lecture, one hour optional discussion. Three credit hours.

PHYS 4389, 4399, 4489 Undergraduate Research  
Prerequisites: consent of department chairperson, junior or senior standing, compliance with approved guidelines (available from chairperson). Trains the student to analyze, plan and conduct experimental work on a research problem. Frequent conferences and a study of research literature with a final report are required. May extend over two semesters. Four to six hours per week for each hour of credit earned. Exact hourly commitment per week will depend on the nature of the project and will be agreed on in advance by the student and the instructor. Two, three, or four credit hours.

PHYS 4499, 4929, 4939, 4999 Special Topics  
Prerequisite: Consent of instructor. Advanced, specialized topics of current interest in physics and astronomy. Dual-listed in the UALR Graduate Catalog at the 5000-level. One, two, three, or four hours of lecture or equivalent per week. One, two, three, or four credit hours.
ADMINISTRATION AND STAFF

University of Arkansas System
Donald R. Bobbitt, President

Board of Trustees
Mike Akin, Chairman
Jane Rogers, Vice Chairman
Jim Von Gremp, Secretary
Ben Hyneman, Assistant Secretary
Stephen Broughton, M.D.
John Goodson
Sam Hilburn
David Pryor
John Tyson
Mark Waldrip

University of Arkansas at Little Rock
Board of Visitors
M. Jane Dickey, Chair
Jerry Adams, Vice Chair
Mark Doramus, Secretary-Treasurer
John Bailey
Haskell Dickinson
Hon. Lanny Fite
Jeff Fox
Jay Hartman
Janet Jones
Jerry C. Jones
Lewis May
Lisenne Rockefeller
Danyelle J. Walker
Mike Wilson

George W. Donaghey Foundation
Board of Directors
John Riggs, IV, Chair
Philip S. Anderson
Gregory W. Flesher
J. French Hill
Walter E. Hussman, Jr.
R. Bart Roach
George Worthen

Foundation Fund Board of Directors
Tjuana Byrd, Chair
Christine Bailey
Sharon S. Bailey
Helen C. Buchanan
Ashley E. Carper
Sheila Castin
Joe V. Chacko
Donna Cone
Scott Copas
Dr. Joe Crow
The Honorable Dawn Creekmore
Troy Duke
J. Bradford Eichler
Brenda Mitchell Fulkerson
Jack Grundfest
Jay C. Hartman
Steve Holcomb
Bryan E. Hosto
Delena Choong Hurst
Edmond G. Hurst
Michel Leidermann
Fletcher Lord
Cristina S. Monterrey
Donald S. Richardson
Bill Roehrenbeck
Joel Douglas Ruminer
Martha Ann Sawrie Stephenson
Scott Schuh
Jay T. Taylor
Martin Thoma
Sam Walls, Jr.
Michael A. Williams, Sr.
Odette B. Woods
Jane M. Yocum

Alumni Association Board of Directors
Anthony W. Black, Fundraising Committee
Mary Cantrell, Communications Committee – Chair
Ginger Daril, Communications Committee
Thomas Dickinson, Membership Committee
Tamika Edwards, Fundraising Committee
Sean Glancy, Fundraising Committee
Malcolm Glover, Communications Committee
Scott Gordon, President
Lee Johnson, Scholarship Committee, Chair
Joe Kilpatrick, Scholarship Committee
Mark Leggett, Membership Committee
Paul Nolte, Scholarship Committee
GG Millard, Membership Committee
Christian O’Neal, Secretary/Treasurer
Don Riggin, Fundraising Committee, Chair
Frank Scott, Communications Committee, Co-Chair
Scott Schuh, Membership Committee
Rick Sellars, Scholarship Committee
Kristi Smith, Membership Committee
Eileen Sotomora, Fundraising Committee
Rebecca Ward, Vice President
Sherry Wilkins Wortsmith, Scholarship Committee

Office of the Chancellor
Joel E. Anderson, Chancellor
Priscilla McChristian, Chief of Staff
Sandra Robertson, Director of Budget, Planning, and Institutional Research

Office of the Development
Bob G. Denman, Vice Chancellor for Development

Office of the Provost and Vice Chancellor for Academic Affairs
Sandra Robinson, Interim Provost and Vice Chancellor for Academic Affairs
Karen Wheeler, Associate Vice Chancellor for Academic Affairs, Curriculum, Assessment and Diversity
Christina Drale, Associate Vice Chancellor for Academic Affairs, Faculty and Administrative Affairs
Daryl Rice, Associate Vice Chancellor for Academic Affairs, Student Success
Thea Hoeft, Division Chief of the Office of Undergraduate Academic Advising
Jesse W. Mason, Director of Cooperative Education
Malissa Mathis, Director of the Office of Transfer Student Services
Jerry Stevenson, Dean, Extended Programs
Patrick Pellicane, Vice Provost for Research/Dean of the Graduate School

Office of the Vice Chancellor for Educational and Student Services
Charles W. Donaldson, Vice Chancellor for Educational and Student Services
Darryl McGee, Assistant Vice Chancellor
Tammy Harrison, Division Chief for Enrollment Planning Services
Vacant, Division Chief for Student Development/Dean of Students
Joyce Hall, Director of Records and Registration
Tammy Harrison, Director of Admissions and Financial Aid
Brenda Thomas, Manager of the Bookstore (Barnes & Noble)
Jan L. Austin, Assistant Vice Chancellor of Campus Life
H. Mike Kirk, Director of Counseling and Career Planning Services
Sharon Downs, Director of the Disability Resource Center
Logan C. Hampton, Division Chief, Director of Donaghey Student Center
Marie Sandusky, Director of Health Services
Debra Gentry, Director of Housing
Linda Barker, Director of Educational Talent Search (TRIO)
Brad Patterson, Assistant Vice Chancellor for Testing Services and Student Life Research

Office of the Vice Chancellor for Finance and Administration
Bob Adams, Vice Chancellor for Finance and Administration
Steve McClellan, Associate Vice Chancellor for Finance and Administration
David Millay, Associate Vice Chancellor for Finance and Administration
Annette Murdock Tangye, Director of Human Resources
Scott Kaufman, Director of Mail Services
Sandra Vail, Director of Physical Plant
Brad King, Director of Public Safety

Office of the Vice Chancellor for Information Systems
Evelyn E. (Jeannie) Winston, Vice Chancellor for Information Services

Office of the Vice Chancellor for University Advancement
Bill Walker, Vice Chancellor for University Advancement
Joni Lee, Associate Vice Chancellor for University Advancement
Judy Williams, Executive Director of Communications
Christian O’Neal, Executive Director of Alumni Relations

Athletics Department
Chris Peterson, Director of Athletics
Richard Turner, Assistant Director of Athletics/Compliance
George Lee, Assistant Director of Athletics/Business Operations
Gary Hogan, Assistant Director of Athletics/External Operations
Joe Angolia, Sports Information Director
John Barron, Director of Athletic Performance
Chasse Conque, Director of Development
Jan Dannaway, Coordinator of Student-Athlete Academic Support Services
John Evans, Stephens Center Manager
Andrea Nunez, Director of Sales/Senior Woman Advisor
Adams, Alois J.  
Associate Professor of Applied Science  
B.A., University of Dallas  
Ph.D., University of Florida

Akhnoukh, Amin K.  
Assistant Professor of Construction Engineering  
B.S., Cairo University  
M.S., Kansas State University  
Ph.D., University of Nebraska-Lincoln

Agarwal, Nitin  
Assistant Professor of Information Science  
B.Tech., Indian Institute of Information Technology  
Ph.D., Arizona State University

Al-Rizzo, Hussain  
Professor of Systems Engineering  
B.Sc., M.S., University of Mosul  
Ph.D., University of New Brunswick

Al-Shukri, Haydar J.  
Associate Professor of Applied Science  
B.S., M.S., University of Baghdad  
Ph.D., Saint Louis University

Ali, Nawab  
Research Assistant Professor of Graduate Institute of Technology  
B.S., M.Sc., M.Ph., Ph.D., Aligarh University

Amrhein, Laura M.  
Assistant Professor of Art  
B.A., James Madison University  
M.A., Ph.D., Virginia Commonwealth University

Anderson, Charles M.  
Professor of Rhetoric and Writing  
B.A., Texas Lutheran College  
M.ACT., University of Tennessee  
Ph.D., University of Iowa

Anderson, Gary T.  
Professor of Systems Engineering  
B.S.E.E., Rice University  
M.S., Ph.D., University of Texas at Austin

Anderson, Joel E.  
Professor of Political Science  
B.A., Harding College  
M.A., American University  
Ph.D., University of Michigan

Anson, Edward M.  
Professor of History  
B.A., Drake University  
Ph.D., University of Virginia

Ashby, Wendy  
Assistant Professor of German  
B.A., Weber State University  
M.A., Bowling Green State University  
Ph.D., University of Arizona

Atcherson, Samuel  
Assistant Professor of Audiology  
B.S.Ed., University of Georgia  
M.Ed., University of Georgia  
Ph.D., University of Memphis

Babiceanu, Radu F.  
Associate Professor of Systems Engineering  
B.S., Polytechnic University of Bucharest  
M.S., University of Toledo  
Ph.D., Virginia Tech

Bacot, Hunter  
Director, Institute of Government

Bailey, Janet L.  
Professor of Management  
B.B.A., University of Texas-Pan American  
Ph.D., University of North Texas

Bakr, Mamdouh M.  
Professor of Mechanical/Manufacturing Engineering Technology  
B.S., Cairo University  
M.S., Ph.D., Purdue University

Baldwin, Deborah  
Professor of History  
B.S., Ball State University  
Ph.D., University of Chicago

Baltosser, William H.  
Professor of Biology  
B.A., Western New Mexico University  
M.S., Ph.D., New Mexico State University

Bandre, Patricia E.  
Assistant Professor of Reading Education  
B.S., Baker University  
M.S., Kansas State University  
Ph.D., The Ohio State University

Barrett, T. Greg  
Professor of Educational Leadership  
B.A., Emory University  
M.B.A., Georgia State University  
M.A., Ph.D., University of Michigan

Bayrak, Coskun  
Professor of Computer Science  
B.S., Slippery Rock University of Pennsylvania  
M.S., Texas Tech University  
Ph.D., Southern Methodist University

Belford, Bob  
Associate Professor of Chemistry Education  
Ph.D., Arizona State University

Bell, Joseph  
Professor of Management  
B.A., Bloomburg University  
M.B.A., Michigan State University  
J.D., T.M. Cooley Law School

Bell-Tolliver, LaVerne  
Associate Professor of Social Work  
B.A., Drury College  
M.S.W., University of Arkansas at Little Rock  
M.A., Dallas Theological Seminary  
Ph.D., Texas Women’s University

Berleant, Daniel  
Professor of Information Science  
B.S., Massachusetts Institute of Technology  
M.S., Ph.D., University of Texas at Austin

Berry, Brian  
Assistant Professor of Organic Chemistry  
B.S., M.S., Ph.D., University of Arkansas at Little Rock

Bhattacharyya, Abhijit  
Professor of Systems Engineering  
B.T., Indian Institute of Technology  
M.S., Ph.D., Rutgers University

Biris, Alexandru  
Professor of Systems Engineering  
B.S., M.S., University of Cluj  
Ph.D., University of Arkansas at Little Rock

Blacklock, James R.  
Professor of Construction Engineering Technology  
B.S.C.E., Texas A&M University  
M.S.C.E., Southern Methodist University  
Ph.D., University of Arizona
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blevins-Knabe, Belinda</td>
<td>Professor of Psychology</td>
<td>University of Texas</td>
</tr>
<tr>
<td>Boateng, Kwasi</td>
<td>Associate Professor of Mass Communication</td>
<td>University of Cape Coast, Ohio University</td>
</tr>
<tr>
<td>Boden-McGill, Carrie</td>
<td>Associate Professor of Education</td>
<td>Wichita State University, Ohio State University</td>
</tr>
<tr>
<td>Bouaynaya, Nidhal</td>
<td>Assistant Professor of Systems Engineering</td>
<td>Illinois Institute of Technology, University of Illinois at Chicago</td>
</tr>
<tr>
<td>Boury, Robert W.</td>
<td>Professor of Music</td>
<td>Manhattan School of Music, University of Michigan</td>
</tr>
<tr>
<td>Brice, William D.</td>
<td>Assistant Professor of Management</td>
<td>University of Hawaii</td>
</tr>
<tr>
<td>Briscoe, David L.</td>
<td>Associate Professor of Sociology</td>
<td>University of Arkansas at Little Rock, Southern Illinois University at Carbondale</td>
</tr>
<tr>
<td>Brown, Jane H.</td>
<td>Professor of Art</td>
<td>University of Texas, University of North Carolina at Chapel Hill</td>
</tr>
<tr>
<td>Bruhl, Win G.</td>
<td>Associate Professor of Art</td>
<td>Auburn University, B.S., M.A.T., Southeast Missouri State University, Montana State University</td>
</tr>
<tr>
<td>Bruhn, Russel E.</td>
<td>Professor of Information Science</td>
<td>University of Wisconsin, Stevens Point, Bemidji State University, Iowa State University, Washington State University</td>
</tr>
<tr>
<td>Bryan, Karen M.</td>
<td>Professor of Music</td>
<td>Georgia State University, University of Georgia, Indiana University</td>
</tr>
<tr>
<td>Bunch, Clea B.</td>
<td>Associate Professor of History</td>
<td>University of Arkansas, University of Arkansas</td>
</tr>
<tr>
<td>Burgin, John</td>
<td>Associate Professor of Early Childhood Education</td>
<td>Hendrix College, Indiana University at Bloomington, University of Arkansas at Fayetteville</td>
</tr>
<tr>
<td>Burns, Ralph</td>
<td>Professor of English</td>
<td>University of Texas, Montana</td>
</tr>
<tr>
<td>Bush, John M. IV</td>
<td>Associate Professor of Biology</td>
<td>Louisiana Tech University, Louisiana State University</td>
</tr>
<tr>
<td>Burns, Keith</td>
<td>Assistant Professor of Computer Science</td>
<td>University of Pennsylvania, Colorado State University</td>
</tr>
<tr>
<td>Byrne, Jamie M.</td>
<td>Interim Dean, College of Professional Studies</td>
<td>University of Delaware, University of Pennsylvania, Murray State University, University of South Florida</td>
</tr>
<tr>
<td>Carenbauer, Michael</td>
<td>Professor of Music</td>
<td>Berklee College of Music,Bowdoin College, University of South Florida</td>
</tr>
<tr>
<td>Carmack, Jeffrey</td>
<td>Instructor of Nursing</td>
<td>University of Arkansas-Little Rock</td>
</tr>
<tr>
<td>Carmack, Mary</td>
<td>Assistant Professor of Nursing</td>
<td>University of Arkansas-Little Rock</td>
</tr>
<tr>
<td>Carr, James K.</td>
<td>Professor of Construction Management</td>
<td>Clarion State College, University of Oklahoma</td>
</tr>
<tr>
<td>Cates, Kevin</td>
<td>Assistant Professor of Art</td>
<td>University of Arkansas at Little Rock, University of Memphis</td>
</tr>
<tr>
<td>Chadwick, Frankie G.</td>
<td>Instructor in Rhetoric and Writing</td>
<td>University of Central Arkansas, Memphis State University</td>
</tr>
<tr>
<td>Chan, Yupo</td>
<td>Professor of Systems Engineering</td>
<td>University of Tennessee, Massachusetts Institute of Technology</td>
</tr>
<tr>
<td>Chapman, Wayne</td>
<td>Associate Professor of Theatre Arts</td>
<td>University of Arizona, University of Utah</td>
</tr>
<tr>
<td>Cheatham, Rosalie M.</td>
<td>Assistant Professor of French</td>
<td>University of Arkansas at Little Rock, University of Illinois</td>
</tr>
<tr>
<td>Chen, Tar-Pin</td>
<td>Professor of Physics</td>
<td>Chung Yuan University, University of Waterloo, New York</td>
</tr>
<tr>
<td>Chiang, Chia-Chu</td>
<td>Associate Professor of Computer Science</td>
<td>Soochow University, Eastern Michigan University, Arizona State University</td>
</tr>
<tr>
<td>Clemmer, Ann V.</td>
<td>Instructor in Political Science</td>
<td>University of Arkansas, University of Texas</td>
</tr>
<tr>
<td>Clemmons, Karina</td>
<td>Assistant Professor of Education</td>
<td>University of North Carolina</td>
</tr>
<tr>
<td>Clifton, Thomas G.</td>
<td>Assistant Professor of Art</td>
<td>University of Minnesota, B.S., M.A.T., Minnesota State University-Moorhead, Savannah College of Art and Design</td>
</tr>
<tr>
<td>Collier-Tenison, Shannon</td>
<td>Associate Professor of Social Work</td>
<td>Hendrix College, George Warren Brown School of Social Work</td>
</tr>
<tr>
<td>Cawood, Gary</td>
<td>Professor of Art</td>
<td>Auburn University, University of Tennessee</td>
</tr>
<tr>
<td>Cellitti, Mirtha Anarella</td>
<td>Associate Professor of Teacher Education</td>
<td>Instituto Universitario Pedagogico de Caracas, University of Houston, University of South Carolina</td>
</tr>
</tbody>
</table>
Connelly, Jeffrey B.  
Professor of Earth Science  
B.A., The College of Wooster  
M.S., Bowling Green State University  
Ph.D., University of Tennessee  

Copeland, Nita J.  
Senior Instructor in Health Sciences  
B.A., MAT, Harding University  

Corwyn, Robert  
Associate Professor of Psychology  
B.S., M.A. University of Arkansas at Little Rock  
Ph.D., Memphis University  

Cox, Cassandra  
Associate Professor of Mathematics  
B.A., Hendrix College  
M.A., Ph.D., Washington University  

Cox, Earnest  
Associate Professor of Rhetoric and Writing  
B.A., M.A., University of Arkansas at Little Rock  
Ph.D., Texas Christian University  

Crawshaw, Steven A.  
Advanced Instructor in Physics  
B.A., University of Michigan, Flint  
M.S., Auburn University  

Crisp, Catherine  
Assistant Professor of Social Work  
B.A., Rutgers University of New Jersey  
M.A., University of Kansas  
Ph.D., University of Texas  

Crisp, Sally C.  
Senior Instructor in Rhetoric and Writing  
B.A., University of Arkansas at Little Rock  
M.A., University of Arkansas, Fayetteville  
Ed.D., University of Arkansas at Little Rock  

Cui, Jingbiao  
Assistant Professor of Physics and Astronomy  
B.S., Anhui University  
M.S., Ph.D., University of Science and Technology  

Cui, Jintao  
Assistant Professor of Mathematics  
BS Dalian University of Technology  
PhD Louisiana State University.  

Dagtas, Serhan  
Professor of Information Science  
B.S., Bilkent University  
M.S., Ph.D., Purdue University  

Dailey, Cynthia  
Associate Professor of Accounting  
B.A., M.A., Henderson State University  
Ph.D., Louisiana Tech University  

Darsey, Jerry A.  
Professor of Chemistry  
B.S., Ph.D., Louisiana State University  

Davis, Marshel D.  
Assistant Professor of Health Sciences  
B.A., Little Rock University  
M.A., State College of Arkansas  
M.S.E., University of Central Arkansas  

Dearman, David  
Associate Professor of Accounting  
B.S., University of Arkansas at Little Rock  
M.B.A., Arkansas State University  
Ph.D., University of Memphis  

Delaney, Jason  
Assistant Professor of Economics  
Ph.D., Georgia State University  

Deiser, Andrew J.  
Associate Professor of Spanish  
B.S., Indiana Purdue University  
MA, Ph.D., Indiana University  

Dhonau, Stephanie  
Assistant Professor of Education  
B.S., Georgetown University  
MA, Colorado State University  
Ed.D., University of Arkansas at Little Rock  

Dole, Wanda  
Library Professor  
Dean of Ottenheimer Library  
B.A., Lawrence University  
M.A., Tufts University  
M.S., University of Illinois at Urbana-Champaign  

Donaldson, Charles W.  
Vice Chancellor of Education and Student Services  
Associate Professor of Education  
B.S., Philander Smith College  
MS, State College of Arkansas  
Ed.D., University of Arkansas at Fayetteville  

Dorn, Linda  
Professor of Teacher Education  
B.S., University of Tennessee at Martin  
MEd, University of Arkansas at Little Rock  
Ph.D., Texas Women’s University  

Drale, Christina S.  
Associate Vice Chancellor for Academic Affairs/Professor of Mass Communications  
B.A., MA, Ph.D., University of California, San Diego  

Driskill, Gerald W.  
Professor of Speech Communication  
BA, MA, Abilene Christian University  
Ph.D., University of Kansas  

Driver, Stephen  
Assistant Professor of Art  

Drummond, Andrew J.  
Associate Professor of Political Science  
BA, Indiana University, Bloomington  
MA, Ph.D., University of California, Irvine  

Duyar, Ibrahim  
Associate Professor of Educational Administration  
B.S., MA, Ankara University  
MS, Ph.D., University of Wisconsin, Madison  

Eaton, Elizabeth E.  
Instructor / Clinical Supervisor of Audiology and Speech Pathology  
B.A., Baylor University  
M.A., Texas Woman’s University  

Edison, Steven W.  
Associate Professor in Marketing and Advertising  
B.S., North Dakota State University  
MBA, Gonzaga University  
Ph.D., Texas Tech University  

Edwards, Timothy  
Associate Professor of Journalism  
BA, Southern Arkansas University  
MSMC, Arkansas State University  
Ph.D., University of Kentucky  

Elder, Erick M.  
Professor of Economics  
B.S., Allegheny College  
MS, Ph.D., University of Pittsburgh  

Elsalloukh, Hassan  
Associate Professor of Mathematics  
B.S., Henderson State University  
MS, University of Arkansas at Little Rock  
Ph.D., Baylor University  

English, Arthur  
Professor of Political Science  
B.S., Bryant College  
MA, Ph.D., Brown University  

Estes, Sarah Beth  
Associate Professor of Sociology / Anthropology  
BA, Hendrix College  
MA, Ph.D., University of Iowa
Farewell, Stephanie  
Associate Professor of Accounting  
BBA, MACC, Ph.D., University of Oklahoma

Faucett, John M.  
Associate Professor of Psychology  
B.A., Hendrix College  
M.S., Ph.D., Tulane University

Faust, Judith  
Instructor of Social Work  
B.S., University of Kansas  
MSW, Tulane University

Felan III, Joe T.  
Associate Professor of Management  
BBA, MBA, Baylor University  
Ph.D., University of South Carolina

Finzer, Erin S.  
Assistant Professor of Spanish  
Ph.D., University of Kansas

Fisher, David  
Associate Professor of Rhetoric and Writing  
B.A., Drury College  
M.A., Clemson University  
M.S., University of Missouri  
Ph.D., Iowa State University

Flinn, Juliana  
Professor of Anthropology  
A.B., Barnard College  
M.P.H., Columbia University School of Public Health  
Ph.D., Stanford University

Franklin, Jennifer L.  
Assistant Professor of Audiology  
B.A., Radford University  
M.S., East Tennessee State University  
Au.D., University of Florida

Fruechting, Sara K.  
Assistant Professor of Nursing  
B.A., University of Arkansas, Fayetteville  
B.S., Creighton University  
M.N.Sc., University of Arkansas for Medical Sciences

Fulmer, James R.  
Associate Professor of Mathematics  
B.S., Arkansas State Teachers College  
MA, Ed.D., University of Arkansas at Fayetteville

Funk, Mark F.  
Associate Professor of Economics  
BA, Trinity University  
Ph.D., University of California-Davis

Gaffney, Jeffrey S.  
Professor of Chemistry  
B.S., M.S., Ph.D., University of California, Riverside

Galchus, Kenneth E.  
Professor of Economics  
B.B.A., City College of New York  
M.A., Ph.D., Washington University

Garland-Angel, Amy  
Instructor in Social Work  
B.A., Louisiana Technological University  
M.S.W., Grambling University

Garner, William E.  
Associate Professor of Rehabilitation Counseling  
B.S., B.S.E., M.R.C., Arkansas State University  
Ph.D., Southern Illinois University

Garnett, Mary Anne  
Professor of Foreign Languages  
B.A., University of Wisconsin-Eau Claire  
M.A., Ph.D., University of Wisconsin-Madison

Gealt, Michael A.  
Dean College of Math & Science  
B.A., Temple University  
Ph.D., Rutgers University

Geissler, Gary L.  
Professor of Marketing and Advertising  
B.A., .MB.A., Louisiana State University  
Ph.D., University of Georgia

Gentry, Bethelyn F.  
Professor of Audiology and Speech Pathology  
B.A., University of Arkansas at Little Rock  
M.S., University of Arkansas for Medical Sciences  
Ph.D., Memphis State University

Ghosh, Anindya  
Associate Professor of Chemistry  
M.S., IIT Kanpur  
Ph.D., Carnegie Mellon University

Giammo, Joseph D.  
Associate Professor of Political Science  
B.A., Ph.D., University of Texas at Austin

Giese, Jon Mark  
Associate Professor of School of Mass Communications  
B.A., M.A., University of North Texas at Denton  
Ph.D., Pennsylvania State University

Golden, James W.  
Professor of Criminal Justice  
B.S., BA, MPA, Arkansas State University  
Ph.D., Sam Houston State University

Govindan, Rathinaswamy B.  
Research Assistant Professor of Applied Sciences  
B.S., MS, University of Madras  
Ph.D., Indian Institute of Technology

Grace, Stephen C.  
Associate Professor of Biology  
B.S., Louisiana State University  
Ph.D., Duke University

Groesbeck, Rolf  
Associate Professor of Music History / Literature  
BA, Oberlin College  
MA, Ph.D. New York University

Guy, Clarence H.  
Instructor of Philosophy and Liberal Studies  
B.A., Arkansas Baptist College  
M.A., Southern Methodist University

Guyette, Thomas W.  
Professor of Audiology and Speech Pathology , Chairperson, Department of Audiology and Speech Pathology  
BA, University of Missouri  
MS, University of Wisconsin  
Ph.D., University of Kansas

Hakutani, Naoki  
Assistant Professor of Music  
B.M., Northwestern University  
M.M., Indiana University in Bloomington  
D.M.A., University of Texas at Austin

Hall, John R.  
Associate Professor of Finance  
B.S., MBA, Florida State University  
Ph.D., Indiana University

Hall, Maria Petra Ingrid  
Assistant Professor of Art  
BA, MFA, San Diego State University

Hall, Tony A.  
Assistant Professor of Physics and Astronomy  
B.S., Arkansas State University  
MS, Ph.D., Purdue University

Hanson, Richard H.  
Professor of Chemistry  
B.S., Mankato State College  
Ph.D., Kansas State University
Hardeman, Melissa A.  
Senior Instructor of Mathematics  
B.S., M.S., Nicholls State University

Harris, Cheryl  
Instructor in Rhetoric and Writing  
B.S.E., Southwest Missouri State University  
M.A., University of Arkansas, Fayetteville

Hayn, Judith A.  
Associate Professor of Secondary Education  
B.A., Pittsburg (KS) State University  
M.S., Ed, Ph.D., University of Kansas

He, Qingfang  
Associate Professor of Applied Science  
B.A., Jiangxi Agricultural University  
MA, China Agricultural University  
Ph.D., Arizona State University

Herrmann, Andrea Watson  
Professor of Rhetoric and Writing  
B.A., Michigan State University  
MA, Ed.D., Teachers College, Columbia University

Hicks, Yslan  
Associate Professor of Theatre and Dance  
B.A., West Georgia College  
MFA, Texas Tech University

Highley, Pat  
Advanced Instructor  
B.A., University of Arkansas at Little Rock  
MS, University of Arkansas for Medical Sciences  
Au.D., A.T. Still University

Hines, Robert J.  
Associate Professor of Psychology  
Chairperson, Department of Psychology  
B.S., Union College  
M.A., Saint Bonaventure University  
Ph.D., Purdue University

Hollander, Allison D.  
Senior Instructor of Rhetoric and Writing  
Director of Writing Center  
B.S.E., Arkansas State University  
M.Ed., M.A., Louisiana State University  
Ed.D., University of Arkansas at Little Rock

Hollander, Larry C.  
Professor of Finance  
B.S.CE, University of Missouri at Rolla  
MB.A., University of Tulsa  
Ph.D., Oklahoma State University

Hollingsworth, Jami J.  
Instructor in Rehabilitation  
B.A., M.A., University of Arkansas, Fayetteville

Holzer, Linda  
Professor of Music  
BMUS, Northwestern University  
MM, University of North Carolina  
DMUS, Florida State University

Hood, Karen  
Assistant Professor of Marketing  
B.S., University of Tennessee  
MB.A., University of Tennessee  
Ph.D., University of Tennessee

Huang, Guoliang  
Associate Professor of Systems Engineering  
B.S., Zhongshan University  
M.S., Beiling Institute of Technology  
Ph.D., University of Alberta

Hudson, Mitchell K.  
Professor of Applied Science  
B.S., East Texas Baptist College  
MS, Sam Houston State University  
Ph.D., Baylor University

Hughes, Gail H.  
Associate Professor of Educational Leadership  
B.S.E, MSE Henderson State University  
Ph.D., University of Memphis

Hune, Jennifer  
Associate Professor of Teacher Education  
B.S.E, MSE, University of Arkansas at Little Rock  
Ed.D., University of Kentucky

Hunt, Andrew  
Associate Professor of Secondary Education  
B.S.E, M.Ed, Ph.D., University of Arkansas at Fayetteville

Hunter, Angela  
Associate Professor of Philosophy and Liberal Studies  
BA, Colorado College  
MA, New York University  
Ph.D., Emory University

Hutchinson, Lisa  
Associate Professor of Criminal Justice  
B.S., MS, University of Southern Mississippi  
Ph.D., University of New Orleans

Hutton, Terri J.  
Assistant Professor of Audiology and Speech Pathology  
B.S., Marquette University  
MFA, Southern Methodist University

Iqbal, Kamran  
Professor of Systems Engineering  
BE, N.E.D. Engineering University, Karachi  
MS, MBA, Ph.D., The Ohio State University

Isom, Toran E.  
Senior Instructor in Rhetoric and Writing  
B.S.E, MSE, University of Central Arkansas  
Ed.D., University of Massachusetts

Ito, Kinko  
Professor of Sociology  
B.A., Nanzan University, Nagoya, Japan  
M.A., Ph.D., Ohio State University

Jackson, Christy J.  
Advanced Instructor of Mathematics  
B.A. Hendrix College  
M.S., University of Arkansas at Little Rock

Jacobson, William  
Professor of Rehabilitation Education  
B.S., Ohio State University  
MEd, Boston College  
Ed.D., University of Arkansas at Fayetteville

Jauss, David  
Professor of English  
BA, Southwest State University  
MA, Syracuse University  
Ph.D., University of Iowa

Jennings, Steven F.  
Professor of Information Science  
B.S., Graceland College  
MS, Ph.D., Iowa State University  
Exec. MBA, University of Colorado

Jensen, George  
Professor of Rhetoric and Writing  
BA, Old Dominion University  
MA, Ph.D., University of South Carolina

Johnston, Cheryl  
Senior Instructor of Speech Communication  
M.A., University of Arkansas at Little Rock

Johnston, Malissa  
Instructor of Speech Communication  
B.A., M.A., University of Arkansas at Little Rock

Jones, James V.  
Assistant Professor of Earth Sciences  
B.S., The University of the South  
M.S., University of Wyoming  
Ph.D., University of Texas
Jones, Kim A.
Assistant Professor of Social Work
B.S.W, Southern Illinois University
MSW, University of Illinois at Urbana-Champaign
Ph.D., Smith College

Kincade, Trudy C.
Instructor of Music
B.S., BM, Eastern Illinois University
MA-Piano Performance, Eastern Illinois University

Kirk, John A.
Donaghey Professor of History Chair of the Department of History
B.A., University of Nottingham
Ph.D., University of Newcastle upon Tyne

Klein, Michael
Professor of Rhetoric and Writing
B.A., University of Northern Colorado
MA, University of Maine
Ph.D., University of Minnesota

Kleve, Maurice G.
Professor of Biology
B.S., MA, Mankato State College
Ph.D., University of Houston

Kosmatov, Nickolai
Assistant Professor of Mathematics and Statistics
B.S., Moscow Institute for Physics and Technology
Ph.D., Auburn University

Kumar, Gaurav
Associate Professor of Accounting
BC, Panjab University
MFC, Kurukshetra University
Ph.D., University of Mississippi

Kural, Karen M.
Associate Professor of Rhetoric and Writing
BA, MA, University of Utah
Ph.D., Purdue University

Kushner, Jason D.
Associate Professor of Counselor Education
BA, MA, University of South Florida
Ph.D., University of Arkansas at Fayetteville

Kyong-McClain, Jeffrey
Assistant Professor of History

Kim, Jung H.
Professor of Systems Engineering
B.S., Seoul National University
MS, Ph.D., University of Iowa

Lai, Lifeng
Assistant Professor of Systems Engineering
BE, ME, Zhejiang University
Ph.D., Ohio State University

Landrum, Nancy E.
Associate Professor of Management
B.A., M.A., Marshall University
MB.A., Idaho State University
Ph.D., New Mexico State University

Lanza, Janet
Professor of Biology
B.S., State University of New York at Stony Brook
MS, University of Massachusetts
Ph.D., University of Connecticut

Le, Duong
Assistant Professor of Economics/Finance
Ph.D., University of Oklahoma

Ledbetter, Michael T.
Professor of Earth Science
BAAS, MS, Memphis State University
Ph.D., University of Rhode Island

Legette, Lakeshia R.
Assistant Professor of Mathematics, B.S.
Columbia College
MS, University of North Carolina at Charlotte, M.S.
Ph.D., Howard University.

L'Eplattenier, Barbara
Professor of Rhetoric and Writing
BA, Mankato State University
MA, University of Nebraska
Ph.D., Purdue University

Jones, Kim A.
Assistant Professor of Social Work
B.S.W, Southern Illinois University
MSW, University of Illinois at Urbana-Champaign
Ph.D., Smith College
Levernier, James A.
Professor of English
BA, Marquette University
MA, Ph.D., University of Pennsylvania

Lewis, Johanna Miller
Professor of History
BA, Salem College
MA, Wake Forest University
Ph.D., College of William and Mary

Lewis, Krista
Associate Professor of Anthropology
Ph.D., University of Chicago

Lindeman, Bruce
Professor of Finance and Real Estate
BA, Syracuse University
Ph.D., Duke University

Lindsay, Anne C.
Associate Professor of Early Childhood Education
BA, McMaster University
MA, Ph.D., University of Victoria

Liu, Xian,
Professor of Systems Engineering
BA, University of Waterloo
Ph.D., University of British Columbia

Lloyd, E. Christopher
Assistant Professor of Social Work
BA, University of Chicago
MA, University of North Carolina at Chapel Hill

López-Ramírez, Adriana
Assistant Professor of Sociology
B.A., Escuela Nacional de Antropología e Historia
M.A., El Colegio de México
M.A., Ph.D., Brown University

Lowery, Catherine O.
Senior Instructor of Information Technology
BA, University of Arkansas, Fayetteville
M.A., University of Arkansas at Little Rock

Lu, Lianfang
Assistant Professor of Mathematics Education
BS Sichaun Normal University
M.Ed, University of Oklahoma
PhD, Louisiana State University.

Luneau, M. David, Jr. PE
Associate Professor of Electronics and Computer Engineering Technology
B.S.EE, Rice University
MSEE, Georgia Institute of Technology

Lynch, Thomas J.
Professor of Biology
B.S., Lock Haven State College
MS, Ph.D., University of Houston

Macheak, Carol I.
Assistant Professor of Library Science
B.A., University of Central Arkansas
MLS, George Peabody College at Vanderbilt University

Maguire, Moira
Associate Professor of History
B.A., George Washington University
MA, Northeastern University
Ph.D., American University

Mann, Kristin Dutcher
Associate Professor of History
B.A., MAT Trinity University
Ph.D., Northern Arizona University

Mantle, Eric R.
Professor of Art
BFA, Cleveland Institute of Art
MFA, Ohio University

Marinova-Pavlov, Kristina
Instructor of Music
BM University of Central Arkansas
M.A., University of Michigan

Martin, Floyd W.
Professor of Art
B.A., Carleton College,
MA, University of Iowa
Ph.D., University of Illinois

Mastin, David F.
Associate Professor of Psychology
B.S., University of Alabama
M.S., Jacksonville State University
Ph.D., University of Southern Mississippi

Matson, JoAnne Liebman
Professor of Rhetoric and Writing
B.A., Kirkland College (Hamilton College)
MA, Ph.D., University of Minnesota
JD, University of Arkansas at Little Rock

McAbee, Kris
Assistant Professor of English

McAdams, JoEllen
Associate Professor of Education

McAlpine, David C.
Professor of Foreign Languages
BAE, Wayne State College
MA, Universidad Internacional
Ed.D., University of South Dakota

McCallum, Daniel B.
Associate Professor of Mathematics and Statistics
BS., Louisiana Polytechnic Institute
MS, Clemson University
Ph.D., Virginia Polytechnic Institute and State University

McGee, Newman E.
Professor of Health Education
BA, Little Rock University
MSE, Henderson State College
Ed.D., University of Arkansas at Fayetteville

McIntryre, Kristen
Associate Professor of Speech Communication
BA, University of North Dakota
MA, Iowa State University
Ph.D., North Dakota State University

McMillian, Margaret E.
Associate Professor of Earth Science
BA, The Colorado College
MS, Colorado School of Mines
Ph.D., University of Wyoming

McMillan, Thomas C.
Professor of Mathematics
B.S., University of Idaho
M.S., Polytechnic Institute and State University
M.A., Ph.D., University of Utah

Menhart, Steve
Professor of Electronics Engineering Technology
B.S.c, University of Warwick
MSEE, Ph.D., Texas Tech University

Meyers, Ronald B.
Assistant Professor, U of A Clinton School of Public Service
B.S., MA, Ph.D. The Ohio State University
Midturi, Swaminadham  
Professor, Mechanical Engineering Technology  
B.E., Government College of Engineering, India  
M. Tech., Indian Institute of Technology, India  
Ph.D., Indian Institute of Technology, India

Milanova, Mariofanna  
Professor of Computer Science  
M.Sc., Ph.D., Technical University, Sofia, Bulgaria

Miller, John, Jr.  
Assistant Professor of Social Work  
B.A., M.S.W., University of South Carolina  
Ph.D., University of Tennessee

Minnick, J. Bradley  
Associate Professor of English  
BA, MEd, Ph.D., University of Pittsburgh

Minsker, Steven  
Professor of Computer Science  
B.S., Brooklyn College  
MS, University of Pennsylvania  
Ph.D., Massachusetts Institute of Technology

Mirivel, Julien  
Associate Professor of Speech Communication  
B.A., M.A., University of Northern Iowa

Mitchell, Robert B.  
Professor of Management  
B.S., MBA, DBA, Louisiana Tech University

Moak, Stacy C.  
Associate Professor of Criminal Justice  
B.S., MS, University of Southern Mississippi  
Ph.D., University of New Orleans

Mohan, Seshadri  
Professor of Systems Engineering  
B.E., University of Madras  
M.Tech, Indian Institute of Technology  
Ph.D., McMaster University

Moley, Pauline  
Associate Professor of Teacher Education  
B.A., M.A., Ph.D., University of Missouri, Kansas City

Moneyhon, Carl H.  
Professor of History  
BA, MA, University of Texas  
Ph.D., University of Chicago

Montague, David R.  
Associate Professor of Criminal Justice  
B.A., Morehouse College  
MA, George Washington University  
Ph.D., Howard University

Moore, Bruce D.  
Associate Professor of Psychology  
B.S., Virginia Polytechnic Institute and State University  
MA, Ph.D., University of Nebraska-Lincoln

Mullins, Heidi  
Assistant Professor of Art  
Ed.D., University of Houston

Nahrwold, Cynthia A.  
Associate Professor of Rhetoric and Writing  
B.A., Ball State University  
MA, Arizona State University  
Ph.D., New Mexico State University

Nicholson, Nannette  
Associate Professor of Audiology and Speech Pathology  
B.S., Northwest Missouri State University  
MS, Illinois State University  
Ph.D., University of Kansas Medical Center

Nickels, Jim E.  
Associate Professor of Marketing  
B.A., M.S., Henderson State University  
JD, University of Arkansas, Fayetteville

Nisanci, Ibrahim H.  
Professor of Systems Engineering  
B.S., MS Orta Dogu Teknik University  
MS, Ph.D., Loughborough University

Nolen, Amanda L.  
Associate Professor of Educational Foundations  
B.S., The University of North Texas  
MS, Ph.D., Baylor University

Oliva, Robert  
Professor of Accounting  
JD, Whittier College School of Law  
LLM, University of San Diego School of Law  
Ph.D., Florida International University

Otters, Rosalie  
Assistant Professor of Social Work  
MSW, Washington University  
Ph.D., University of North Texas

Parker, Mary L.  
Professor of Criminal Justice  
BA, MA, Northeast Louisiana  
Ph.D., Sam Houston State University

Patangia, Hirak C.  
Professor of Electronics Engineering Technology  
B Tech, Indian Institute of Technology  
MS, University of New Brunswick  
Ph.D., McGill University

Pearson, Carolyn  
Professor of Educational Foundations  
BA, MS, Ph.D., University of South Florida

Peck, James H.  
Professor of Biology  
B.S., Iowa State University  
MS, University of Iowa  
Ph.D., Iowa State University

Pellicane, Patrick J.  
Professor of Construction Management  
BA, Mathematics, The City College of New York  
MA, Mathematics, St. John’s University  
MS, Ph.D., Colorado State University

Pendergraft, Stacy M.  
Associate Professor of Theatre Arts and Dance  
B.A., University of Tulsa  
MFA, Arizona State University

Penn, Suzanne  
Assistant Professor of Clinical Education  
B.A., Hendrix College  
JD, Tulane University

Peter, Thomas F.  
Associate Professor of Mathematics  
B.S., MS, Ph.D., Florida State University

Philpotts, Trey  
Professor of English  
BA, MA, University of Virginia  
Ph.D., University of Delaware

Pidugu, Srikanth  
Associate Professor, Mechanical Engineering Technology  
B.S., Osmania University, India  
M.S., Indian Institute of Technology, India  
Ph.D., Old Dominion University

Pierce, Elizabeth  
Associate Professor of Information Science  
B.S., The Pennsylvania State University  
MS, Iona College  
Ph.D., University of Michigan
Pruessner, Karin  
Research Assistant Professor of Applied Science  
Ph.D., Max-Planck-Institut fur Metallforschung, University of Stuttgart

Quimby, Donna G.  
Associate Professor of Health Sciences  
B.S., University of Arkansas at Little Rock  
MSE, Henderson State University  
Ph.D., University of Arkansas, Fayetteville

Ramsey, Clifford E.  
Professor of Psychology  
BA, MA, Rice University  
Ph.D., University of Florida

Raphael, Jay E.  
Professor of Theatre Arts and Dance  
BA, Brooklyn College  
MA, Northwestern University  
Ph.D., Michigan State University

Ray, Chris  
Associate Professor of Construction Management  
B.S., MS, Central Missouri State University  
JD, Saratoga University School of Law

Reddy, Rama N.  
Professor of Systems Engineering  
B.S., Bangalore University  
MS, Indian Institute of Technology  
MS, Ph.D., Mississippi State University

Rhodes, Carlton M.  
Associate Professor of Journalism  
B.S.E., University of Central Arkansas  
MMA, University of Mississippi

Rice, Daryl H.  
Associate Vice Chancellor of Academic Affairs/Professor of Political Science  
BA, MA, Ph.D., Purdue University

Richard, Terry  
Professor of Sociology  
B.A., Southwestern University  
M.A., University of Texas  
Ph.D., North Texas University

Richardson, Sharon A.  
Associate Professor of Educational Leadership  
B.S., University of Arkansas at Pine Bluff  
MA, Kent State University  
Ed.D., University of Akron

Richeson, David T.  
Associate Professor of Music  
BM, MM, University of Tennessee

Roberson, Carey, W.  
Assistant Professor of Art  
BFA, Henderson State University  
MFA, Louisiana Tech University

Robertson, Roby  
Professor of Public Administration  
BA, MA, University of Wyoming  
Ph.D., Purdue University

Robinson, Ann E.  
Professor of Educational Services/Leadership  
BA, MA, University of Oklahoma

Robinson, Greg  
Assistant Professor of Audiology and Speech Pathology  
B.S., M.S., Southwest Missouri State University  
Ph.D., Michigan State University

Rodríguez, Mercedes M.  
Instructor of International and Second Language Studies  
M.A., West Virginia University

Robison, Sally  
Associate Professor of Mathematics  
B.S., MS, University of Missouri-Columbia  
Ph.D., University of Nebraska-Lincoln

Rollberg, Jeanne M.  
Associate Professor of Journalism  
BA, Wesleyan College  
MA, University of Missouri

Rose, Donna K.  
Assistant Professor of Library Science  
B.A., University of Arkansas at Little Rock  
MSLS, Vanderbilt University

Ross, Frances M.  
Assistant Professor of History  
B.A., M.A., University of Arkansas, Fayetteville
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Degrees</th>
</tr>
</thead>
</table>
| Romney, Charles       | Assistant Professor of History / Graduate   | B.A., Pomona College
|                       | Coordinator                                 | M.A., Ph.D., University of California at Los Angeles                    |
| Ross, James           | Assistant Professor of History              | B.A., University of Arkansas at Little Rock                              |
|                       |                                             | M.A., University of Massachusetts                                       |
|                       |                                             | Ph.D., Auburn University                                                 |
| Rucks, Conway T., Jr. | Professor of Marketing                      | B.S., BA, Louisiana Tech University                                       |
|                       |                                             | M.B.A., University of Arkansas                                           |
|                       |                                             | D.B.A., Louisiana Tech University                                         |
| Sanderson, Robert E.  | Professor of Sociology                      | B.A., M.A., Memphis State University                                      |
|                       |                                             | Ph.D., Louisiana State University                                        |
| Sandgren, Eric        | Dean, Donaghey College of Engineering and   | Ph.D., Purdue University                                                 |
|                       | Information Technology                      |                                                                          |
| Saunders, Joy         | Assistant Professor of Spanish              | B.A., M.A. University of Oklahoma-Norman                                 |
|                       |                                             | M.A., University of Texas at Austin                                     |
| Schafer, Patricia E.  | Associate Professor of Nursing              | A.D.N., University of Arkansas at Fayetteville                           |
|                       |                                             | B.S.N, Missouri Southern State College                                   |
|                       |                                             | M.S., University of Oklahoma Health Science Center                      |
|                       |                                             | Ph.D., Kennedy-Western University                                        |
| Schlumberger, Ann B. | Professor of Nursing                        | Chairperson, Department of Nursing                                       |
|                       |                                             | B.S.N, MSN, University of Central Arkansas                              |
|                       |                                             | Ed.D., University of Arkansas at Little Rock                             |
| Schonert, David A.    | Instructor of Mathematics                   | B.A., M.S., University of Arkansas at Little Rock                        |
| Scott, Joyce          | Associate Professor of Nursing              | A.S.N., Arkansas State University                                         |
|                       |                                             | B.S.N, University of Arkansas at Pine Bluff                              |
|                       |                                             | M.S.N., University of Central Arkansas                                  |
| Scranton, Margaret    | Professor of Political Science              | B.A., Randolph-Macon                                                     |
|                       |                                             | M.A., Ph.D., University of Pittsburgh                                   |
| Sedivy, Amy           | Assistant Professor of Secondary Education  | B.A., Millikin University                                                |
|                       |                                             | M.S., E.D., Southern Illinois University                                |
|                       |                                             | Ph.D., Loyola University                                                |
| Seigar, Marcus        | Assistant Professor of Physics              | B.S., Imperial College                                                  |
|                       |                                             | M.Sc., University of Manchester                                          |
|                       |                                             | Ph.D., Liverpool John Moores University                                 |
| Seker, Remzi          | Professor of Computer Science / Chair,      | Department of Computer Science                                           |
|                       | Department of Computer Science              | B.S., MS Cukurova University                                             |
|                       |                                             | Ph.D., University of Alabama at Birmingham                               |
| Sellers, Sharon E.    | Instructor of French                        | Director of Language Resource Center                                    |
|                       |                                             | B.A., University of Arkansas at Little Rock                              |
|                       |                                             | M.A., University of Arkansas, Fayetteville                              |
| Seo, Hye-Won          | Associate Professor of Physics and Astronomy| B.S., Ewha Womens University                                            |
|                       |                                             | MS, Ph.D., University of Houston                                       |
| Shapley, Kathy        | Assistant Professor of Audiology and Speech| B.S., Stephen F. Austin State University                                |
|                       | Pathology                                   | M.A., University of Houston                                             |
|                       |                                             | M.A., Ph.D., University of Nebraska-Lincoln                              |
| Shaikh, Ali Uddin     | Professor of Chemistry                      | B.Sc., M.Sc., Calcutta University                                       |
|                       |                                             | M.S., Ph.D., Howard University                                         |
| Shapley, Kathy        | Assistant Professor of Audiology and Speech| B.S., Stephen F. Austin State University                                |
|                       | Pathology                                   | M.A., University of Houston                                             |
|                       |                                             | M.A., Ph.D., University of Nebraska-Lincoln                              |
| Sherwin, Elizabeth    | Assistant Professor of Psychology           | B.A., Bar Ilan University                                               |
|                       |                                             | M.S., Ph.D., Virginia Commonwealth University                           |
| Sikes, Robert S.      | Associate Professor of Biology              | B.S., University of Arkansas at Little Rock                              |
|                       |                                             | M.S., Memphis State University                                          |
|                       |                                             | Ph.D., University of Minnesota                                          |
| Sink, David W.        | Professor of Public Administration          | A.B., M.A., Miami University                                            |
|                       |                                             | D.P.A., University of Georgia                                           |
| Smith, Aj             | Professor of Art                            | B.F.A., Kansas City Art Institute                                       |
|                       |                                             | M.F.A., Queens College, City University of New York                     |
| Smith, Bruce D.       | Professor of Special Education / Associate  | Dean, College of Education                                              |
|                       | Dean, College of Education                  | B.S., UCLA                                                              |
|                       |                                             | M.Ed., Loyola Marymount University                                      |
| Smith, Marcia M.      | Senior Instructor in Rhetoric and Writing    | B.A., M.A., University of Arkansas at Little Rock                       |
|                       |                                             | Ph.D., University of Memphis                                            |
| Smith-Olinde, Laura K.| Associate Professor of Audiology            | B.A., M.B.E., Ph.D., Louisiana State University                         |
| Smoller, Laura Ackerman| Professor of History                        | A.B., Dartmouth College                                                 |
|                       |                                             | A.M., Ph.D., Harvard University                                        |
| Song, Yong-Jin        | Assistant Professor of Speech Communication | B.A., Hannam University                                                 |
|                       |                                             | M.A., Syracuse University                                               |
|                       |                                             | Ph.D., University of Kansas                                             |
| Squires, Mark         | Advanced Instructor of Construction         | Management                                                             |
|                       |                                             | B.S., M.B.A., University of Arkansas at Little Rock                     |
| Stauffer, Linda K.    | Associate Professor of Rehabilitation       | B.S., Trenton State College                                             |
|                       |                                             | M.Ed., University of Arkansas, Fayetteville                            |
|                       |                                             | Ph.D., University of Arkansas, Fayetteville                            |
Steinmeier, Robert C.  
Associate Professor of Chemistry  
B.S., Ph.D., University of Nebraska

Stevenson, Jerry G.  
Dean of Extended Programs  
Professor of Public Administration  
AA, South Georgia College  
A.B., M.S.W., Ph.D., University of Georgia

Stodola, Zabelle  
Professor of English  
B.A., University of Kent at Canterbury  
M.A., Ph.D., Pennsylvania State University

Stone, Warren S.  
Assistant Professor of Management  
B.S., M.B.A., Ph.D., Virginia Commonwealth University

Street, Rebecca A.  
Instructor of Mathematics  
B.S., Sweet Briar College  
M.S., University of Arkansas at Little Rock

Suter, W. Newton  
Professor of Educational Leadership  
B.A., University of California at Riverside  
M.A., San Francisco State University  
Ph.D., Stanford University

Talburt, John  
Professor of Information Science  
B.S., Arkansas State University  
M.S., Ph.D., University of Arkansas, Fayetteville

Tang, Fusheng  
Assistant Professor of Biology  
B.S., Central China Normal University  
M.S., Chinese Academy of Sciences  
Ph.D., University of Iowa

Tang, Peiyi  
Associate Professor of Computer Science  
M.Eng., East China Normal University  
Ph.D., University of Illinois at Urbana-Champaign

Tarasenko, Olga  
Assistant Professor of Biology  
M.D., Ph.D., Kyrgyz State Medical Academy

Taylor, Cynthia  
Associate Professor of Accounting  
B.S., MA University of Arkansas at Little Rock  
Ph.D., Oklahoma State University

Terry, H. Andrew  
Professor of Finance  
B.A., Hendrix College  
MA, Ph.D., University of Michigan

Thomas, Jan  
Associate Dean, College of Arts, Humanities, and Social Sciences / Professor of Philosophy  
B.A., University of Colorado, Boulder  
M.A., Ph.D., University of Arizona, Tucson

Thomas, Shaun  
Assistant Professor of Criminal Justice  
B.A., University of Akron  
M.A., Ph.D., Louisiana State University

Thombre, Avinash  
Associate Professor of Speech Communication  
B.A., Indira Gandhi National Open University  
M.S., Bangalore University  
Ph.D., University of New Mexico

Trevino-Richard, Terry L.  
Professor of Sociology  
B.A., Southwestern University  
M.A., University of Texas  
Ph.D., North Texas University

Tudor, Thomas R.  
Professor of Management  
B.S., Virginia Polytechnic Institute and State University  
M.B.A., Ph.D., Virginia Commonwealth University

Tudoreanu, Mihail E.  
Associate Professor of Information Science and Systems Engineering  
B.S., University “Al.I.Cuza” Iasi  
MS, Ph.D., Washington University

Turney, Howard, M.  
Professor of Social Work  
B.B.A., University of Central Arkansas  
MSW, University of Arkansas at Little Rock  
Ph.D., Florida State University

Turturro, Carolyn Lazaro  
Assistant Professor in Social Work  
B.A., Herbert H. Lehman College  
M.A., New York University

Ulmer, Robert R.  
Chairperson, Department of Speech Communications / Associate Professor of Speech  
B.A., University of Saskatchewan  
A.M., North Dakota State University  
Ph.D., Wayne State University

Umphers, Ida S.  
Senior Instructor of Mathematics  
B.S., M.S. University of Arkansas at Little Rock.

Vander Putten, James J.  
Associate Professor of Educational Leadership  
B.S.E, University of Wisconsin-Stout  
M.S, Indiana University-Bloomington  
Ph.D., University of Michigan

Vannatta, Dennis  
Professor of English  
B.S.E, Central Missouri State University  
MA, Ph.D., University of Missouri

Vaughn-Neely, Elizabeth  
Associate Professor of Educational Leadership  
BA, Syracuse University  
MED, University of Oregon  
Ph.D., Oregon State University

Vinikas, Vincent A.  
Professor of History  
BA, Pennsylvania State University  
MA, Ph.D., Columbia University

Viswanathan, Tito  
Professor of Chemistry  
B.S., University of Delhi  
MS, University of Houston  
Ph.D., Tulane University

Wagner, Gary  
Associate Professor of Economics  
BA, Youngstown State University  
MA, Ph.D., West Virginia University

Walker, Jeffrey T.  
Professor of Criminal Justice  
B.A., University of Arkansas at Fayetteville  
M.A., University of Arkansas at Little Rock  
Ph.D., Sam Houston State University

Wang, Hong Li  
Associate Professor of Biology  
B.A., Zhejiang University  
Ph.D., University of Newcastle

Wang, Xiaoshen  
Professor of Mathematics  
B.S., MS, Jilin University  
Ph.D., Michigan State University

Warrick, Michael  
Professor of Art  
B.S., Illinois State University  
MFA, Southern Illinois University
Watts, Michael  
Associate Professor of Accounting  
B.B.A., M.B.A., University of Michigan  
J.D., University of Arkansas at Little Rock

Wayland, Jane P.  
Dean of the College of Business/Professor of Marketing  
B.S., MBA, University of Southern Mississippi  
Ph.D., University of North Texas

Webb, Roger  
Professor of Psychology  
B.A., Yale University  
Ph.D., University of North Carolina at Chapel Hill

Wichinsky, Lillian  
Assistant Professor of Social Work  
B.A., University of Florida  
M.S.W., California State University  
Ph.D., Florida International University

Wigand, Dianne  
Associate Professor of Public Administration  
B.A., M.A. Texas Tech University  
Ph.D., Arizona State University

Wigand, Rolf T.  
Professor of Information Science  
B.B.A., M.A., Texas Tech University  
Ph.D., Michigan State University

Wilkerson, Patricia  
Assistant Professor of Social Work  
B.A., University of Arkansas at Little Rock  
M.S.W., University of Arkansas at Little Rock  
Ph.D., Jackson State University

Williams, Joe  
Associate Professor of Rhetoric and Writing  
B.A., Lehigh University  
M.A., West Chester University  
Ph.D., Syracuse University

Williams-Smith, Marjorie  
Professor of Art  
B.F.A., Howard University  
M.F.A., Pratt Institute

Wood, Betty K.  
Associate Professor of Teacher Education  
B.S.E., University of Central Arkansas  
M.S.E., University of Arkansas at Little Rock  
Ph.D., Purdue University

Wright, Andrew B.  
Associate Professor of Systems Engineering  
B.S., University of South Carolina  
M.S., Massachusetts Institute of Technology  
Ph.D., Rensselaer Polytechnic Institute

Wrobel, Sharon Leigh  
Assistant Professor of Public Administration  
B.A., M.P.A., Arizona State University  
Ph.D., University of Texas at Dallas

Wu, Ningning  
Professor of Information Science  
B.S., M.S., University of Science & Technology of China  
Ph.D., George Mason University

Xi, Jinxiang  
Assistant Professor of Systems Engineering  
B.S., Shanghai JiaoTong University  
M.S., Xian JiaoTong University  
Ph.D., Texas A&M University

Xie, Haiyan  
Associate Professor of Construction Management  
B.S., M.S., Xi’an University of Architecture and Technology  
M.S., Ph.D. University of Florida

Xie, Mengjun  
Assistant Professor of Computer Science  
B.S., M.E., East China Normal University, China  
Ph.D., College of William and Mary

Xu, Xiaowei  
Professor of Information Science  
B.Sc., Nankai University  
M.Sc., Chinese Academy of Sciences  
Ph.D., University of Munich

Yanovik, Stephen  
Assistant Professor of Biology  
B.S., Auburn University  
M.S., Purdue University  
Ph.D., University of Oklahoma

Ye, Cang  
Associate Professor of Systems Engineering  
B.S., M.S. The University of Science and Technology of China  
Ph.D., The University of Hong Kong

Ye, Xiu  
Professor of Mathematics  
B.S., Wuhan University  
M.S., Ph.D., University of Pittsburgh

Yoder, R. Paul  
Associate Professor of English  
B.A., Louisiana State University  
M.A., Ohio State University  
Ph.D., Duke University

Yoshigoe, Kenji  
Associate Professor of Computer Science  
B.S., Ph.D., University of South Florida

Yu, Shucheng  
Assistant Professor of Computer Science  
B.S., M.S. The University of Science and Technology of China  
Ph.D., The University of Hong Kong

Yu, Xian  
Assistant Professor of Statistics  
BEng, Beijing University of Technology  
MS, Texas A&M University  
MS, University of Alaska Fairbanks  
Ph.D, University of Texas at Dallas.

Zacher, Dale E.  
Associate Professor of Mass Communication  
B.A., University of North Dakota  
M.S., Ph.D., Ohio University

Zeng, Lirong  
Assistant Professor of Biology  
B.S., Hunan Agricultural University  
M.S., Zhongshan University  
Ph.D., Ohio State University

Zhang, Jing  
Associate Professor of and Systems Engineering  
B.S., M.S.E.E., Southeast University  
Ph.D., Swiss Federal Institute of Technology

Zhang, Wenle  
Associate Professor, Electronics and Computer Engineering Technology

Zhao, Wei  
Professor of Chemistry  
B.S., M.S., Ph.D., Peking University
<table>
<thead>
<tr>
<th>Faculty Emeritus</th>
</tr>
</thead>
</table>
| **Fenton Adams, B.A., L.L.B., JD**  
Professor of Law, (1977-1993) |
| **Luana S. Adams, B.S.N., M.S.N.**  
Associate Professor of Nursing, (1987-2006) |
| **James A. Allen, M.S.**  
Associate Professor of Library Science, (1965-1992) |
| **W. Steve Anderson, B.A., MA, PhD**  
Professor of English, (-2010) |
| **Marc Arnold, PhD**  
Associate Professor of Rhetoric and Writing, (1976-2002) |
| **Lawrence H. Averill Jr., B.A., JD, LLM**  
Charles C. Baum Distinguished Professor of Law, (1982-2001) |
| **Dennis A. Baeyens, B.S., MS, PhD**  
| **George S. Ballard, B.S., B.S.EE, MS**  
Assistant Professor of Computer Science, (1974-2001) |
| **Suzann W. Barr, B.A., MA**  
Instructor in Rhetoric and Writing, (-2012) |
| **Patricia Bauknight, B.A., MSW, PhD**  
Assistant Professor of Social Work, (1976-2003) |
| **Michael A. Beaird, B.A., JD, MLL**  
Associate Professor of Law, (1998 – 2006) |
| **Lester Bilsky, B.A., PhD**  
Professor of History, (1972-2001) |
| **David E. Blevins, B.S.IE, MBA., PhD**  
Professor of Management, (1990-2005) |
| **S. Charles Bolton, B.A., MA, PhD**  
Professor of History, (1973-2009) |
| **Ronald L. Boswell, B.A., MA**  
Assistant Professor of Music, (1967-2006) |
| **Barbara M. Bowlius, B.A., lic.phil.**  
Instructor of German, (1975-2004) |
| **Charles R. Bowlus, B.A., MA, PhD**  
Professor of History, (1973-2000) |
| **Charlene Bradham, B.S.N, MNSc**  
Professor of Nursing, (1976-1997) |
| **Wilfred J. Braithwaite, B.S., MS, PhD**  
Professor of Physics, (2007) |
| **Barbara Jo Bray, B.A., MA, MEd**  
Professor of Theatre Arts and Dance, (-2010) |
| **Joy A. Breckenridge, B.S., MFA**  
Assistant Professor of Theatre Arts and Dance, (2007) |
| **Marion Douglas Buffalo, B.A., MA, PhD**  
Professor of Sociology, (1973-2004) |
| **Ralph M. Burns, B.A., MFA, Ph.D.**  
Professor of English, (1985-2012) |
| **James F. Butler, B.A., MBA., PhD**  
Professor of Economics, (1963-1996) |
| **Jerry P. Butler, B.A., MS, PhD**  
Professor of Speech Communication, (1970-1997) |
| **Frances Cantwell, B.A., B.S.**  
Assistant Professor of Library Science and Assistant Librarian, (1988-1981) |
| **Richard P. Carr, Jr., BB.A., MBA., MS, PhD**  
Associate Professor of Marketing, (1980-1997) |
| **Charles D. Chastain, B.A., MA, PhD**  
Professor of Criminal Justice, (1972-2011) |
| **Roger Chisholm, B.A., MS, PhD**  
Professor of Economics and Finance, (1985-2001) |
| **Lawrence A. Coleman, B.S., MS, PhD**  
Professor of Physics, (1969-2004) |
| **NanJo Dubé Coleman, B.S., MEd, PhD**  
Professor of Secondary Education, (1975-1995) |
| **Marian C. Crawford, B.S., MBE, PhD**  
Professor of Management, (1974-2010) |
| **Huey D. Crisp, B.S., MA, EdD**  
Instructor in Rhetoric and Writing, (1980-2011) |
| **Robert C. Culpepper, B.S., MBA., PhD**  
Professor of Accounting, (1975-1997) |
| **Carolyn Curry, B.A., MA**  
Assistant Professor of Theatre Arts, (1976-1995) |
| **Jesse E. Dancer, B.S., MS, PhD**  
Professor of Audiology and Speech Pathology, (1978-2002) |
| **Priscilla N. Davis, B.S.E, MA, PhD**  
Professor of Audiology and Speech Pathology, (1972-2003) |
| **Larry R. Dickerson, B.A., MA, Ph.D.,**  
Professor of Rehabilitation Counseling, (1978-2012) |
| **Emily S. Dickinson, B.A., MS**  
Assistant Professor of Mathematics, (1963-1993) |
| **E. Faye DiMassimo, B.S.E, MA**  
Assistant Professor of Speech Communication, (1968-1982) |
| **Richard Dixon, B.A., MA**  
Assistant Professor of History, (1953-1975) |
| **Ralph D. Eberly, B.A., PhD**  
Cooper Distinguished Professor of English, (1967-1985) |
| **Victor E. Ellsworth, BME, MM, PhD**  
Associate Professor of Music and Chairperson, Department of Music, (1997-2009) |
| **Dale V. Ferguson, B.S., MS, PhD**  
Professor of Biology, (1970-2004) |
| **Jamie A. Foster, B.S.HE, MSHE, EdD**  
Assistant Professor of Elementary Education, (1985-2001) |
| **Shirley M. Freeman-Trigger, B.S.E, MSE, EdD**  
Associate Professor of Elementary and Early Childhood Education, (1975-2006) |
| **James H. Fribourgh, B.A., MS, PhD, LHD**  
Distinguished Professor of Biology, (1949-1994) |
| **Edward Jay Friedlander, B.S., MA, EdD**  
Professor of Journalism, (1975-1996) |
| **Richard Frothingham, B.A., BD, PhD**  
Professor of Philosophy and Religious Studies, (1962-1986) |
| **Melville Fuller, B.S., MEd, PhD**  
| **Jackie Garner, B.S., MS, PhD**  
Professor of Mathematics, (1992-1999) |
The department provides courses for students pursuing careers in law enforcement, corrections, and juvenile and adult courts. A bachelor of arts in criminal justice, an associate of science in law enforcement, and a minor in criminal justice are available through the department.

**General Information**

**Major in Criminal Justice**

A major in criminal justice requires 30 credit hours, including CRJU 2300, 3303, 3304, 4300, and 4304. While the department will consider similar courses from other schools as substitutes for the CRJU core courses, the acceptance of those courses is solely at the department’s discretion. Students majoring in criminal justice must complete at least 15 hours within the Department of Criminal Justice at UALR. Admission to the major requires completion of RHET 1311, RHET 1312 and GPA of 2.25 or better; transfer students must have at least 12 hours at UALR; however, students may be provisionally admitted to the major and advised within the department before meeting all requirements for admission to the major. For information regarding graduate study in criminal justice, see the UALR Graduate Catalog.

**Minor in Criminal Justice**

A minor in criminal justice requires 18 credit hours, which must include CRJU 2300.

**Associate of Science Degree in Law Enforcement**

This two-year associate degree program in law enforcement requires 62 hours, including CRJU 2300 and 3304. Students pursuing the AS in law enforcement must take at least nine of the required criminal justice hours within the Department of Criminal Justice at UALR. Twenty of the 62 hours must be at the 2000-level or higher. Credits earned for the associate degree may be applied to the bachelor of arts in criminal justice.

### ASSOCIATE OF SCIENCE IN LAW ENFORCEMENT DEGREE REQUIREMENTS

**Core Curriculum (15 hours)**

- MATH 1302 College Algebra
- or MATH 1321 Quantitative and Mathematical Reasoning
- RHET 1311 Composition I
- RHET 1312 Composition II
- SPCH 1300 Speech Communication

One of the following courses

- HIST 2311 US History to 1877
- HIST 2312 US History since 1877
- POLS 1310 American National Government

**Pattern Requirements (23 hours)**

One of the following courses

- MCOM 2330 Mass Media and Society
- SOCI 2300 Introduction to Sociology
- PSYC 2300 Psychology and the Human Experience

Two of the following courses

- ANTH 1415 Physical Anthropology
- ASTR 1301 and 1101 Introduction to Astronomy, Lab
- BIOL 1400 Evolutionary and Environmental Biology
- BIOL 1401 Science of Biology
- CHEM 1409 Chemistry and Society
- ERSC 1302 and 1103 Physical Geology, Lab
- ERSC 1303 and 1103 Historical Geology, Lab

One of the following courses

- ENGL 2337 World Literature
- ENGL 2338 World Literature Themes
- PHIL 2320 Ethics and Society

One of the following courses

- ARHA 2305 Introduction to Visual Art
- MUHL 2305 Introduction to Art
- DRTH 2305 Introduction to Theatre and Dance

**Required Courses for Major (15 hours)**

- CRJU 2300 Introduction to Criminal Justice
- CRJU 3304 Police and Society
- Three upper-level CRJU courses (9 hours)

**Undesignated Electives (9 hours)**

Selected in consultation with the academic advisor

**Proficiency in a second language or a 2000 level course**

- SPAN 1311, 1312 and 2311 OR
- FREN 1311, 1312 and 2311 OR
- GERM 1311, 1312 and 2311 OR
- INTR 1320, 1321 and 2320 or
- CHIN 1311, 1312 and 2311

1. At least 15 hours must be taken within the department.
2. See “Core Requirements for Bachelor Degrees” in the Policy section.
4. See “Associate Degree Requirements” for a complete list of general requirements for associate degrees.
Phyllis J. Moore, B.A., MSE, PhD
Professor of Biology, (1972-2003)

Ray Moore, BM, MA, EdD

Lee Morgans, B.S., MS, PhD
Professor of Biology, (1969-2001)

Morell E. Mullins, JD
Professor of Law, (1979-2004)

Emil C. Muly, BES, MS, PhD

Alice Ann Munson, B.A., MA
Instructor in English, (1969-2011)

Arthur G. Murphey, Jr., B.A., JD, LLM
Professor of Law, (1975-1997)

Russell E. Murphy
Professor of English, (1972-2008)

Linda Musun, B.A., MA, PhD
Professor of Psychology/Dean, Extended Programs, (1978-2011)

Rodney D. Neal, B.S.ME, MSMS, PhD

John R. Pagan, AB, MLitt, JD
Professor of Law, (1975-1996)

Agaton P. Pal, B.S.E, MA, PhD
Professor of Sociology, (1970-1987)

Marylyn J. Parins, B.A., MA, PhD
Professor of English, (1965-1999)

Glenn Pasvogel, B.A., JD
Professor of Law, (1971-2003)

James H. Peck, B.S., MS, PhD
Professor of Biology, (1981-2011)

Joe Phillips, B.A., MA, MFA
Associate Professor of Art, (1980-2000)

John C. Pickett
Professor of Economics and Finance, (1986-2008)

Shirley J. Pine, B.A., MA, PhD
Professor of Audiology and Speech Pathology, (1974-1997)

John B. Pittenger, B.A., MA, PhD
Professor of Psychology, (-2010)

Linda M. Pledger, B.A., MA, PhD
Professor of Speech Communication, (1988-2005)

Forrest H. Pollard, B.S.B.A., MBA., PhD
Professor of Marketing, (1962-1994)

Mary Prentice, B.S., MA, PhD
Associate Professor of Special Education, (1985-2001)

Linda J. Rimer
Professor of Nursing, (1974-2008)

John D. Robson, B.S., MS, PhD
Professor of Sociology, (1975-1999)

Aimar Andre Rollefson, B.A., MA, PhD
Professor of Physics, (1974-2005)

Julian (Jud), Rouch, RLS, B.A., MS, EdS
Professor of Surveying and Land Information, (1985-2001)

Keith B. Runion, B.A., MEd, EdD
Associate Professor of Counselor Education, (1986-2006)

Kathy Sanders, B.S., MALS, MA
Associate Professor of Library Science, (1969-2004)

Luther Sanders, B.S., MA, EdD
Professor of Journalism, (1974-2000)

Luciano A. Santa Cruz, B.A., MSW, DSW
Associate Professor of Social Work, (1978-2005)

Associate Professor of Music

Sally Y. Sedelow, B.A., MA, PhD
Professor of Computer and Information Science, (1985-1995)

Walter A. Sedelow, B.A., MA, PhD
Professor of Computer and Information Science, (1985-1995)

Peter Thomas Sherrill, B.A., MA, PhD

Ralph Shull, B.S., MA, PhD

Jean Sizemore, B.A., MA, MA, PhD
Associate Professor of Art, (1986-2000)

Harold T. Smith, B.A., MA, PhD
Professor of History, (1969-1996)

Smith, Patricia B., B.S., M.A., Ed.D.
Professor of Rehabilitation Education, (1984-2012)

Carol D. Snelson (1971-2007)
Associate Professor of Elementary Education

Neil E. Snortland, B.A., MA, PhD, (-2010)
Professor of Political Science and Chairperson, Department of Political Science

Professor of English

Professor of Health Sciences

Gisela Spieker, B.A., MSW, PhD, (1971-1990)
Professor of Social Work

David S. Spillers, B.S.E, MEd, EdD, (-2010)
Professor of Educational Media

Logan Scott Stafford, B.S., JD (1981-2004)
Professor of Law

Assistant Professor in Health, Physical Education

Associate Professor of Teacher Education

A. Ann Straughn, B.S.N, MSN, (-2010)
Associate Professor of Nursing

Professor of English

Associate Professor of Library and Information Science

Merritt N. Sugg, B.S., PhD, (1975-1999)
Associate Professor of Mathematics and Statistics

Professor of Higher Education

Robert T. Swindell, B.S., PhD (-2009)
Professor of Biology

Judyth A. Swingen, B.S., MS, PhD (2001-2011)
Professor of Accounting
Bill C. Tadlock, B.S., MBA., DB.A.,
(1967-1994)
Associate Professor of Marketing

Barbara B. Taegel, B.S.E, MA, (1960-1996)
Dean of Students / Assistant Professor of Leisure Science

Myra G. Taff-Watson, B.A., MA,
(1982-2006)
Assistant Professor of Counseling, Adult, & Rehabilitation Education

John R. Talburt, B.S., MS, PhD,
(1984-1995)
Professor of Computer and Information Science

Tom Teeter, B.S.E, MLS, EdD, (1972-2002)
Professor of Information Technology

Mary Jean Thomas, B.S., MS, PhD,
(1977-1992)
Professor of Radio, Television, and Film

Associate Professor of Nursing

Perry G. Thompson, B.A., MA, PhD, (1977-2000)
Professor of Gerontology

William H. Traylor, B.S.B.A., MLIS
(1975 – 2006)
Associate Professor of Library Science

Professor of Health Education

Professor of Education and Vice Chancellor for Student Affairs

Gwendolyn Brown Twillie, B.A., MS, PhD (1972-1998)
Associate Professor of Theatre and Dance

Instructor of Military Science

Maurice Weatherton, B.A., MA, PhD
(1974-2000)
Professor of Audiology and Speech Pathology

Instructor of Social Work

Associate Professor of Chemistry
Dean, College of Science and Mathematics

C. Fred Williams, B.A.E, MA, PhD
(1969-2011)
Professor of History

Leroy T. Williams, AA, B.S., MA, PhD
(1977-2011)
Associate Professor of History

Lynda E. Wilson, B.A., MA, PhD, (1980-2000)
Professor of Radio, Television, and Film

Professor of Physics

Assistant Professor of Library Science

David Wood, AB, MA, PhD, (1965-2002)
Professor of Psychology

Associate Professor of Management Information Systems

Dominic T. Yang, B.S., PhD
Professor of Chemistry, (1970-2005)
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor in Geology</td>
<td>246</td>
</tr>
<tr>
<td>Minor in German</td>
<td>80</td>
</tr>
<tr>
<td>Minor in Gerontology</td>
<td>213</td>
</tr>
<tr>
<td>Minor in Health, Human Performance and Sport Management</td>
<td>250</td>
</tr>
<tr>
<td>Minor in Human Services</td>
<td>198</td>
</tr>
<tr>
<td>Minor in Information Assurance</td>
<td>158</td>
</tr>
<tr>
<td>Minor in Information Assurance Curriculum</td>
<td>159</td>
</tr>
<tr>
<td>Minor in Information Technology</td>
<td>185</td>
</tr>
<tr>
<td>Minor in Legal Studies</td>
<td>100</td>
</tr>
<tr>
<td>Minor in Linguistics (21 hours)</td>
<td>68</td>
</tr>
<tr>
<td>Minor in Mass Media (18 hours)</td>
<td>206</td>
</tr>
<tr>
<td>Minor in Mathematics</td>
<td>258</td>
</tr>
<tr>
<td>Minor in Military Science</td>
<td>210</td>
</tr>
<tr>
<td>Minor in Music</td>
<td>87</td>
</tr>
<tr>
<td>Minor in Philosophy (18 hours)</td>
<td>93</td>
</tr>
<tr>
<td>Minor in Philosophy/Religious Studies (18 hours)</td>
<td>93</td>
</tr>
<tr>
<td>Minor in Photography</td>
<td>57</td>
</tr>
<tr>
<td>Minor in Physics</td>
<td>271</td>
</tr>
<tr>
<td>Minor in Political Science</td>
<td>98</td>
</tr>
<tr>
<td>Minor in Presidential Studies</td>
<td>98</td>
</tr>
<tr>
<td>Minor in Presidential Studies</td>
<td>98</td>
</tr>
<tr>
<td>Minor in Professional Communication</td>
<td>217</td>
</tr>
<tr>
<td>Minor in Real Estate</td>
<td>126</td>
</tr>
<tr>
<td>Minor in Religious Studies (18 hours)</td>
<td>94</td>
</tr>
<tr>
<td>Minor in Secondary Education (18 hours) Fast-Track option</td>
<td>46</td>
</tr>
<tr>
<td>Minor in Sign Language Studies</td>
<td>144</td>
</tr>
<tr>
<td>Minor in Social Work</td>
<td>213</td>
</tr>
<tr>
<td>Minor in Spanish</td>
<td>80</td>
</tr>
<tr>
<td>Minor in Speech Communication</td>
<td>217</td>
</tr>
<tr>
<td>Minor in Sport Management</td>
<td>251</td>
</tr>
<tr>
<td>Minor in Statistics</td>
<td>258</td>
</tr>
<tr>
<td>Minor in Studio Art</td>
<td>57</td>
</tr>
<tr>
<td>Minor in Writing</td>
<td>109</td>
</tr>
<tr>
<td>Minors Available</td>
<td>112</td>
</tr>
<tr>
<td>Minors Available</td>
<td>131</td>
</tr>
<tr>
<td>Minors in Management</td>
<td>133</td>
</tr>
<tr>
<td>Minors in Marketing and Advertising/Public Relations</td>
<td>136</td>
</tr>
<tr>
<td>Minors in Psychology</td>
<td>105</td>
</tr>
<tr>
<td>Mission</td>
<td>iv</td>
</tr>
<tr>
<td>Molecular Biotechnology Concentration</td>
<td>229</td>
</tr>
<tr>
<td>Music Education</td>
<td>87</td>
</tr>
<tr>
<td>Name Changes</td>
<td>4</td>
</tr>
<tr>
<td>Nondiscrimination</td>
<td>5</td>
</tr>
<tr>
<td>Nonprofit Leadership Studies</td>
<td>112</td>
</tr>
<tr>
<td>Office of Admissions and Financial Aid</td>
<td>11</td>
</tr>
<tr>
<td>Office of Campus Life</td>
<td>37</td>
</tr>
<tr>
<td>Office of International Services</td>
<td>35</td>
</tr>
<tr>
<td>Office of Records and Registration</td>
<td>28</td>
</tr>
<tr>
<td>Office of Transfer Student Services</td>
<td>32</td>
</tr>
<tr>
<td>Office of Undergraduate</td>
<td>19</td>
</tr>
<tr>
<td>Online and Off-Campus Programs</td>
<td>52</td>
</tr>
<tr>
<td>Ophthalmic Technologies</td>
<td>223</td>
</tr>
<tr>
<td>Optometry</td>
<td>223</td>
</tr>
<tr>
<td>Other Administrative Areas</td>
<td>viii</td>
</tr>
<tr>
<td>Other Programs</td>
<td>72</td>
</tr>
<tr>
<td>Ottenheimer Library</td>
<td>39</td>
</tr>
<tr>
<td>Parking Fees</td>
<td>31</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>224</td>
</tr>
<tr>
<td>Picking a Major</td>
<td>16</td>
</tr>
<tr>
<td>Placement and credit validation in second languages</td>
<td>7</td>
</tr>
<tr>
<td>Post-Baccalaureate Students</td>
<td>23</td>
</tr>
<tr>
<td>Praxis Series Tests</td>
<td>46</td>
</tr>
<tr>
<td>Pre-Law Studies</td>
<td>43</td>
</tr>
<tr>
<td>Pre-Medical and Pre-Dental</td>
<td>222</td>
</tr>
<tr>
<td>Pre-Pharmacy</td>
<td>224</td>
</tr>
<tr>
<td>Pre-Professional Studies</td>
<td>221</td>
</tr>
<tr>
<td>Pre-Professional Studies in the College of Science and Mathematics</td>
<td>43</td>
</tr>
<tr>
<td>Private Aid</td>
<td>14</td>
</tr>
<tr>
<td>Private Scholarships and Awards</td>
<td>15</td>
</tr>
<tr>
<td>Programs Abroad and Study Abroad</td>
<td>35</td>
</tr>
<tr>
<td>Prohibiting Sexual Harassment</td>
<td>5</td>
</tr>
<tr>
<td>Provisional Admission</td>
<td>32</td>
</tr>
<tr>
<td>Psi Chi Chapter</td>
<td>104</td>
</tr>
<tr>
<td>Public Safety</td>
<td>40</td>
</tr>
<tr>
<td>Registration Guide</td>
<td>28</td>
</tr>
<tr>
<td>Repeated Courses</td>
<td>10</td>
</tr>
<tr>
<td>Respiratory Care</td>
<td>225</td>
</tr>
<tr>
<td>Retention</td>
<td>45</td>
</tr>
<tr>
<td>Right to Change</td>
<td>ii</td>
</tr>
<tr>
<td>Schedule Adjustment</td>
<td>31</td>
</tr>
<tr>
<td>Scholarship Information</td>
<td>85</td>
</tr>
<tr>
<td>Scholarships</td>
<td>15</td>
</tr>
<tr>
<td>School of Mass Communication</td>
<td>204</td>
</tr>
<tr>
<td>School of Social Work</td>
<td>213</td>
</tr>
<tr>
<td>Secondary Teacher Licensure</td>
<td>45</td>
</tr>
<tr>
<td>Second Language Requirement</td>
<td>22</td>
</tr>
<tr>
<td>Second Language Requirement for all BA and Selected Other Degrees</td>
<td>144</td>
</tr>
<tr>
<td>Sexual Assault</td>
<td>5</td>
</tr>
<tr>
<td>Share America Program</td>
<td>40</td>
</tr>
<tr>
<td>Smoke-Free Campus</td>
<td>5</td>
</tr>
<tr>
<td>Speech, Language, and Hearing Clinic</td>
<td>40</td>
</tr>
<tr>
<td>State Aid</td>
<td>14</td>
</tr>
<tr>
<td>Student Activities</td>
<td>40</td>
</tr>
<tr>
<td>Student Advisement and Information</td>
<td>121</td>
</tr>
<tr>
<td>Student Body</td>
<td>iii</td>
</tr>
<tr>
<td>Student Classifications</td>
<td>10</td>
</tr>
<tr>
<td>Student Conduct</td>
<td>40</td>
</tr>
<tr>
<td>Student Directory</td>
<td>40</td>
</tr>
<tr>
<td>Student Government Association</td>
<td>41</td>
</tr>
<tr>
<td>Student Organizations</td>
<td>41</td>
</tr>
<tr>
<td>Student Organizations</td>
<td>111</td>
</tr>
<tr>
<td>Student Professional Societies</td>
<td>174</td>
</tr>
<tr>
<td>Student Services</td>
<td>37</td>
</tr>
<tr>
<td>Students Who Transfer from Four-Year Institutions</td>
<td>141</td>
</tr>
<tr>
<td>Studio Art Work</td>
<td>57</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>225</td>
</tr>
<tr>
<td>Suspension (from an institution other than UALR)</td>
<td>10</td>
</tr>
<tr>
<td>Suspension (from UALR)</td>
<td>10</td>
</tr>
<tr>
<td>Systems Engineering</td>
<td>188</td>
</tr>
<tr>
<td>Tax-Deductible Educational Expenses</td>
<td>31</td>
</tr>
<tr>
<td>Technical Certificate in Information Assurance</td>
<td>158</td>
</tr>
<tr>
<td>Testing Services</td>
<td>41</td>
</tr>
<tr>
<td>The Office of International Services</td>
<td>39</td>
</tr>
<tr>
<td>Transcripts</td>
<td>10</td>
</tr>
<tr>
<td>Transferring Coursework</td>
<td>10</td>
</tr>
<tr>
<td>Transferring Credit to UALR</td>
<td>33</td>
</tr>
<tr>
<td>Transfer Students</td>
<td>57</td>
</tr>
<tr>
<td>Transfer Student Services</td>
<td>32</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>30</td>
</tr>
<tr>
<td>UALR Role and Scope Developed by the Arkansas State Board of Higher Education</td>
<td>v</td>
</tr>
<tr>
<td>UALR Role and Scope Developed by the UALR Faculty Senate</td>
<td>vi</td>
</tr>
<tr>
<td>UALR Role and Scope Developed by the University of Arkansas Board of Trustees</td>
<td>v</td>
</tr>
<tr>
<td>UALRTeach</td>
<td>45</td>
</tr>
<tr>
<td>Undergraduate Programs</td>
<td>20</td>
</tr>
<tr>
<td>University College</td>
<td>53</td>
</tr>
<tr>
<td>University Core Requirements</td>
<td>45</td>
</tr>
</tbody>
</table>
Important Places
Admissions and Financial Aid are located in the Student Services building.

Dining Services / Catering

Additional dining locations can be found in the Reynolds Business building, the Engineering and Information Technology building, and in the University Commons and Trojan Grill near the residence halls.

Computer Labs open to all students are located in Ottenheimer Library, and additional labs are available by contacting various departments throughout campus.

Things have moved.
A newly built four-story facility has consolidated most student services and administration into one location.

Admissions and Financial Aid

To Benton, Bryant, Hot Springs

Campus Map

Help!
If you are unsure of how to get to a specific location on campus, you can call 501-569-3000.
Additionally, you can visit the university website at ualr.edu for more information.

Have you found a problem on this map? Do you have a suggestion to improve it? Send an email to maps@ualr.edu.