See the ASU web page (www.astate.edu) for current bulletin information.
Student Responsibility
Each student should study this Undergraduate Bulletin and become completely familiar with the organization and the regulations of the university. Failure to do this may result in serious mistakes for which the student shall be held fully responsible.

Policy Statement
Policies and procedures stated in this bulletin—from admission through graduation—require continuing evaluation, review, and approval by appropriate university officials. All statements reflect policies in existence at the time this bulletin went to press, and the university reserves the right to change policies at any time and without prior notice.

University officials determine whether students have satisfactorily met admission, retention, or graduation requirements. Arkansas State University reserves the right to require a student to withdraw from the university for cause at any time.

Equal Opportunity/Affirmative Action
Arkansas State University is an equal opportunity institution and will not discriminate on the basis of race, color, religion, sex, national origin, age, handicap/disability, or other unlawful factors in employment practices or admission and treatment of students. Any questions regarding this policy should be addressed to the Coordinator of Equal Opportunity and Affirmative Action, Arkansas State University, P.O. Box 1500, State University, Arkansas 72467. Telephone (870) 972-3454.

Services for the Disabled
Arkansas State University's Coordinator of Services to students, faculty and staff with disabilities is also the university's compliance coordinator for Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) and the ADA Accessibility Guidelines (ADAAG). In this capacity, the coordinator arranges for academic adjustments and auxiliary aids to be provided to qualified students and coordinates workplace accommodations. The coordinator also is the individual to whom concerns about physical access to facilities, buildings and grounds should be addressed. The coordinator's office is located on the fourth floor of the Chickasaw Building. The telephone number is 870-972-3964. The number for the Telecommunications Device for the Deaf (TDD) is 870-972-3965.

Arkansas State University will provide auxiliary aids, without cost, to those students with verified disabilities who require such services. If service providers are necessary, Arkansas State University will provide appropriately trained providers (other than paid tutors).

See the ASU web page (www.astate.edu) for current bulletin information.
INSTITUTIONAL MEMBERSHIPS

Arkansas State University holds institutional membership in agencies, councils, and organizations important to the quality of its academic programs. Major memberships are shown below.

American Assembly of Collegiate Schools of Business
American Association of Colleges for Teacher Education
American Association of Colleges of Nursing
American Association of State Colleges and Universities
American Association of State Colleges of Agriculture and Renewable Resources
American Mathematical Society
Association for University Business and Economic Research
Association of Schools of Allied Health Professions
Association of Schools of Journalism and Mass Communications
Broadcast Education Association
Council for Advancement and Support of Education
Council of Graduate Schools in the United States
Council on Social Work Education
International Student Exchange
National Association of Schools of Art and Design
National Association of Schools of Music
National Association of Schools of Public Affairs and Administration
National Collegiate Honors Council
National Council for Accreditation of Teacher Education
National Council on Rehabilitation Education
National League for Nursing
National Student Exchange
North Central Association of Colleges and Schools
Southern Council on Collegiate Education for Nursing
Teacher Education Council of State Colleges and Universities

See the ASU web page (www.astate.edu) for current bulletin information.
ACADEMIC CALENDAR 2004-2005

**Fall Semester 2004**
- Orientation for New Faculty .................................................. August 16-17 (M-T)
- Faculty Conference ................................................................. August 18 (W)
- College and Department Faculty Meetings ................................ August 19 (R)
- Residence Halls Open .......................................................... 9:00 a.m. August 20 (F)
- Orientation/Advising for New Students .................................. August 20 (F)
- Open Registration ................................................................. through August 20 (F)
- Welcome Weekend .............................................................. August 21-22 (Sa-Su)
- Regular Classes Begin ........................................................... August 23 (M)
- Extended Registration ......................................................... August 23-29 (M-Su)
- Saturday Classes Begin ....................................................... August 28 (Sa)
- Labor Day Holiday ............................................................. September 6 (M)
- Midterm Exams ................................................................. October 5-11 T-M
- Comprehensive Examination Results Reported to Graduate School ........................................... November 12 (F)
- Session II Classes Begin ..................................................... October 12 (T)
- Midterm Grades Due .......................................................... 12:00 noon October 12 (T)
- Fall Break/Thanksgiving Holiday ........................................ November 22-27 (M-Sa)
- Last Day of Class ................................................................. December 6 (M)
- Study Day .............................................................................. December 7 (T)
- Final Examinations ............................................................. December 8-14 (W-T)
- Graduating Senior Grades Due ........................................ 10:00 p.m. December 15 (W)
- Residence Halls Close (for students not graduating) .......... 12:00 noon December 15 (W)
- All Grades Due ................................................................. 2:00 p.m. December 15 (W)
- Commencement ................................................................. 7:00 p.m. December 17 (F)

**Spring Semester 2005**
- Residence Halls Open .......................................................... 9:00 a.m. January 7 (F)
- Orientation/Advising for New Students ................................. January 7 (F)
- Open Registration ................................................................. through January 7 (F)
- Regular Classes Begin ........................................................ January 10 (M)
- Extended Registration ......................................................... January 10-16 (M-Su)
- Saturday Classes Begin ....................................................... January 15 (Sa)
- Martin Luther King, Jr.’s Birthday Observed (No Classes) .......... January 17 (M)
- Midterm Exams ................................................................. February 22-28 (T-M)
- Session II Classes begin ..................................................... March 1 (T)
- Midterm Grades Due .......................................................... 12:00 Noon March 1 (T)
- Spring Break ......................................................................... March 14-19 (M-Sa)
- Comprehensive Examination Results Reported to Graduate School ........................................... April 1 (F)
- Spring Faculty Association Meeting ................................. April 12 (T)
- Convocation of Scholars ..................................................... April 11-15 (M-F)
- Spring Faculty Association Meeting .................................... April 12 (T)
- Last Day of Class ............................................................... April 25 (M)
- Study Day ............................................................................ April 25 (T)
- Final Examinations ............................................................. April 27- May 3 (W-T)
- Residence Halls Close (for all students not graduating) .......... 12:00 noon May 4 (W)
- Graduating Seniors Grades Due ........................................ 12:00 p.m. May 4 (W)
- All Grades Due in Registrar's Office ................................. 12:00 noon May 5 (F)
- Commencement ............................................................. 7:00 p.m. May 6 (F)

**First Summer Term 2005**
- Open Registration ................................................................. through May 27 (F)
- Residence Halls Open .......................................................... 12:00 noon May 29 (Su)
- Memorial Day Holiday Observed ........................................ May 30 (M)
- Classes Begin ................................................................. June 1 (W)
- Comprehensive Examination Results Reported to Graduate School ........................................... June 10 (F)
- Last Day of Class ................................................................. June 30 (R)
- Final Examinations ............................................................. July 1 (F)
- All Grades Due ................................................................. 12:00 noon July 5 (T)

**Second Summer Term 2005**
- Open Registration ................................................................. through July 1 (F)
- Independence Day Holiday ................................................... July 4 (M)
- Classes Begin ................................................................. July 5 (T)
- Last Day of Class ................................................................. August 3 (W)
- Final Examinations ............................................................. August 4 (R)
- Graduating Seniors Grades Due ........................................ 10:00 p.m. August 4 (R)
- Residence Halls Close (for all students not graduating) .......... 12:00 noon August 5 (F)
- All Grades Due ................................................................. 12:00 noon August 8 (M)
- Commencement ............................................................. 7:00 p.m. August 5 (F)

See the ASU web page (www.astate.edu) for current bulletin information.
DEADLINES 2004-2005

Fall Semester 2004
Last Day for Late Registration or for Adding Courses ......................... August 29 (Su)
Last Day to Change from Credit to Audit (including Second Session) .... August 27 (F)
Last Day to Drop or Withdraw without Financial Assessment ......... August 29 (Su)
Last Day to Drop Course or Withdraw by Web (without fees) .......... August 29 (Su)
Last Day to Drop Session I (first 8 weeks) Classes ....................... September 28 (T)
Last Day for Names to be Added to December Graduation List ........ October 1 (F)
Last Day to Add a 2nd Session Course ........................................... October 11 (M)
Last Day to Drop Individual Course(s) ........................................ October 29 (F)
Last Day to Withdraw from the University ..................................... December 3 (F)

Spring Semester 2005
Last Day for Late Registration or for Adding Courses ......................... January 16 (Su)
Last Day to Change from Credit to Audit (including Second Session) January 14 (F)
Last Day to Drop or Withdraw without Financial Assessment .......... January 16 (Su)
Last Day to Drop Session I (first 8 weeks) Classes ......................... February 15 (T)
Last Day for Names to be Added to May Graduation List ............... February 11 (F)
Last Day to Add a 2nd Session Course ............................................. March 1 (T)
Last Day to Drop Individual Course(s) ............................................ March 25 (F)
Last Day to Withdraw from the University ................................... April 22 (F)

Summer Session 2005
First Term
Last Day for Late Registration, or for Adding Courses .................... June 1 (W)
Last Day to Change from Credit to Audit ........................................... June 1 (W)
Last Day to Drop or Withdraw without Financial Assessment .......... June 2 (R)
Last Day to Withdraw by Web ............................................................. June 2 (R)
Last Day to Drop Individual Course(s) .......................................... June 23 (R)
Last Day to Withdraw from the University ..................................... June 28 (T)

Second Term
Last Day for Late Registration, or for Adding Courses .................... July 5 (T)
Last Day to Change from Credit to Audit ........................................... July 5 (T)
Last Day to Drop or Withdraw without Financial Assessment .......... July 6 (W)
Last Day to Withdraw by Web ............................................................. July 6 (W)
Last Day for Names to be Added to August Graduation List ............. June 10 (F)
Last Day to Drop Individual 10-Week Course ............................... July 25 (M)
Last Day to Drop Individual Course(s) .......................................... July 27 (W)
Last Day to Withdraw from the University .................................... August 1 (M)
Organization of the University

BOARD OF TRUSTEES—2004-2005

Term Expires

Dallas Wood, Paragould ................................................................. January 14, 2008
Mike Gibson, Osceola ................................................................. January 14, 2009
Michael Medlock, Jonesboro ....................................................... January 14, 2005
Florine Tousant Milligan, Forrest City ........................................ January 14, 2006
Richard Bell, Stuttgart ............................................................... January 14, 2007

OFFICERS OF THE BOARD—2004-2005

Michael Medlock ...............................................................Chair
Florine Tousant Milligan ......................................................Vice-Chair
Richard Bell ...............................................................Secretary

PRESIDENT OF THE UNIVERSITY

Officers of the University 2004-2005

Executive Officers

J. LESLIE WYATT, 1995
President of the University
B.A., Abilene Christian University
B.F.A., University of Texas—Austin
M.F.A., University of Texas—Austin
Ph.D., University of Texas—Austin

JENNUS L. BURTON, 1997
Vice President for Finance and Administration
B.S., Texas A & I University
M.S., Texas A & I University
Ph.D., Texas Tech University

SUSAN DAVID ALLEN, 2002 (Oct.)
Vice Chancellor for Research and Academic Affairs
B.S., Colorado College
Ph.D., University of Southern California

STEVE OWENS, 1999
Vice President for University Advancement
B.B.A., University of Mississippi
M.Ed., University of Mississippi

WILLIAM R. STRIPLING, 1979
Interim Vice Chancellor for Student Affairs
B.A., University of Tampa
M.R.C., Arkansas State University
Ph.D., Southern Illinois University

GLENDELL JONES, JR., 2002 (July)
Assistant to the President for Diversity Initiatives
B.B.A., Henderson State University
J.D., University of Arkansas - Fayetteville
M.L., University of Florida

Academic Deans

GEORGE GRANT, 2003 (March)
Dean, Library and Information Resources
A.S., Owen Junior College
B.S., Morehouse College
M.S.L.S., Atlanta University
Ph.D., University of Pittsburgh

GREG PHILLIPS, 2003 (July)
Dean, College of Agriculture
B.A., University of Kentucky
Ph.D., University of Kentucky

JAN WARREN DUGGAR, 2000
Chair, McAdams-Frierson Chair of Bank Management
Dean, College of Business
B.A., Florida State University
M.S., Florida State University
Ph.D., Florida State University

RUSSELL E. SHAIN, 1990
Dean, College of Communications
B.A., University of Kentucky
M.S., University of Illinois
Ph.D., University of Illinois

JOHN BENEKE, 1999
Dean, College of Education
B.S., Marion College
M.A., Ball State University
Ed.D., Ball State University

See the ASU web page (www.astate.edu) for current bulletin information.
The University

MISSION
We pursue and share knowledge within a caring community that prepares students in challenging and diverse ways to become more productive global citizens.

CORE VALUES
We are committed to:
- The pursuit, transmission, and use of knowledge.
- Its pursuit and use in serving the specific needs and interests of all our students.
- Its pursuit and use for the benefit of those external communities we serve, focusing first on those communities developing partnerships with us to address common concerns, but also on the role we can play in serving the national and global community.

Governed by:
- Excellence
- Genuine Opportunity and Diversity

Measured by:
- Integrity

STRATEGIES
We will distinguish ourselves through differentiated strategies that include:
- A student-centered focus
- Globalized opportunities
- Learning together/Excellence in teaching
- Attitudes that reflect a caring community
- Enhanced accessibility

LOCATION
The university is located about halfway between the Mississippi River Valley, one of the most fertile areas in the world, and the Ozark Mountains, rich in American folklore and tradition. The university campus occupies an area of 800 acres on the gently rolling slopes of Crowley’s Ridge, in the City of Jonesboro.

HISTORY
Arkansas State University developed from one of the four state agricultural schools established in 1909 by Act 100, passed by the Arkansas General Assembly. The institution opened as a vocational high school in 1910 and was reorganized as a junior college in 1918. The name of the institution was changed to State Agricultural and Mechanical College by an act of the Arkansas State Legislature in 1925. Authority to extend the curriculum, offer senior college work, and grant degrees was given the institution by the legislature in 1925. Senior college work was initiated in 1930 and the first baccalaureate degrees were granted in 1931. In 1933 the legislature changed the name of the college to Arkansas State College. In January, 1967, the Arkansas State Legislature passed an act authorizing Arkansas State College’s change to university status. Effective July 1, 1967, the institution became Arkansas State University.

A branch campus at Beebe, Arkansas, was added to Arkansas State College by an act of the General Assembly of the State of Arkansas in 1955. The branch campus is now Arkansas State University-Beebe, offering associate degree programs at Heber Springs,

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
Admission

GENERAL INFORMATION
Communications concerning admission to the undergraduate programs of the university should be addressed to the Admissions Office, P.O. Box 1630, State University, AR 72467.

UNRESTRICTED ADMISSION
A. Graduates of state accredited high schools may be admitted with no restrictions if they:
   1. have an ACT composite score of 19 or higher and scores of 19 or higher on the English, math and reading sections*;
   2. a. graduate with an overall GPA of 2.500 on eight semesters OR,
      b. Earn an overall GPA of 2.75 on six OR seven semesters.**
   3. have successfully completed the state-mandated core.
B. Students who are graduates of home-schooled, non-state accredited high schools, or who receive the GED, may be admitted if their composite ACT scores are 19 or higher and they score 19 or higher on the English, math and reading sections.* Additionally, students who are home-schooled or who graduated from non-accredited high schools must provide transcripts which indicate the equivalent of high school graduation with a grade point average of 2.500. The minimum GED score for unrestricted admission is 570 (for students tested after Jan. 1, 2002).

*or comparable scores on the SAT, ASSET or COMPASS
**Students admitted on six OR seven-semester transcripts must submit evidence of high school graduation by presenting a final, official transcript showing date of graduation. Students admitted on six or seven semester transcripts are eligible for early registration privileges.

CORE CURRICULUM FOR UNRESTRICTED ADMISSION
ENGLISH—4 units with emphasis on writing skills, not to include courses in Oral Communications, Journalism, Drama or Debate.
NATURAL SCIENCE—3 units with laboratories chosen from Physical Science, Biology, Chemistry, or Physics. Only one unit may come from a Life Science.
MATHEMATICS—3* units including Algebra I and II, Geometry, and an advanced math course. It is strongly recommended that students take a math course during their senior year.
SOCIAL STUDIES—3 units including one of American History (does not include Contemporary American History), one of World History (not to include World Cultures, World Geography, or Global Studies), and at least 1/2 unit of Civics or American Government (not to include courses in practical arts).

*4 units in 2004

ADMISSION WITH RESTRICTIONS
Students who do not meet the ACT, grade point average criteria and state-mandated core for unrestricted admission may seek admission with restrictions if their high school grade point averages are at least a 2.000. Students who are home-schooled or who graduate from non-accredited high schools must provide transcripts which indicate the equivalent of high school graduation with an overall GPA of 2.000. The minimum GED score for restricted admission is 500 (for students tested after Jan. 1, 2002).
Students admitted with restrictions must take the lowest level remediation required as determined by their ACT scores* and enroll in no more than 15 hours during their first semester of enrollment. Students who are missing state-mandated core will be required to enroll in deficiency areas.

*or comparable scores on the SAT, ASSET or COMPASS

ADMISSION PROCEDURES
Applicants should submit the following credentials as early as possible. Consult the Academic Calendar within this publication for application deadlines.

1. A completed application for admission along with a $15.00 non-refundable processing fee.
2. ACT, SAT, ASSET, or COMPASS scores mailed directly to the university from the testing institution or the high school.
3. An official high school transcript, that includes date of graduation, mailed directly from the institution OR the results of the General Education Development test (GED) mailed directly from the State Department of Education.
4. Documentation (required by Arkansas statute) of two immunizations for measles—rubeola and rubella if applicant was born after January 1, 1957. The first immunization must have been administered after the applicant's first birthday and after 1/1/68. The second immunization may be administered no sooner than 28 days after the first dose.
5. Proof of registration with the Selective Service (all males 18-25).

Students enrolling in degree programs at Arkansas State University may present faxed documents (i.e., ACT scores and transcripts) in lieu of official documents for registration purposes during the first week of classes only. Official copies must follow for students to be permitted to register for subsequent semesters and to obtain official transcripts from Arkansas State University. Students who present official documents which are incongruent with faxed documents will face disciplinary action by the university.

EARLY ENTRANCE
The university accepts students who are not high school graduates if they have (1) eighteen units of high school credit including three units of English, two units of mathematics, two units of natural science, three units of social science, and not more than two units of activity credit; (2) an overall grade average of 3.25; (3) an ACT composite score of 19 or higher; and (4) a recommendation from the high school principal or superintendent. In addition, the early entrant must submit the credentials required of high school graduates except proof of graduation.

HIGH SCHOOL/UNIVERSITY PROGRAM
High school students who meet the prescribed criteria (outlined below) may enroll in university courses prior to graduation when the combined enrollments (high school and college) during any one semester do not exceed a normal academic load. To be considered for this program, a student must submit an application for admission to the university and all documents listed above under Admissions Procedures.

All students must present evidence that they meet the criteria stated under either I. or II. below.

I. ACT/GPA (Please check the applicable score and GPA)
2.75 on 6 semesters
2.50 on 7 semesters
With 19 composite ACT1 score (comparable SAT scores may be used)

FRESHMAN ASSESSMENT AND PLACEMENT
The Arkansas State Board of Higher Education (SBHE) Freshman Assessment and Placement Program prescribes statewide minimum standards for determining whether entering freshmen should be placed in college level math and English courses or in developmental courses in math, English composition, and reading. At ASU, students whose score indicates placement in developmental programs must enroll in those courses during their first academic year.

The following standards apply to all first-time-entering freshmen who are admitted to enroll in degree programs:

Mathematics
The SBHE has prescribed that, “No mathematics course less sophisticated than college algebra may be applied toward a bachelor’s degree in a public university in Arkansas.”

Students who score below 19 on the mathematics section of the Enhanced ACT (American College Testing Program’s ACT Assessment Test), or below 390 on the quantitative portion of the SAT (College Board’s Scholastic Aptitude Test), taken before April 1, 1995; or below 460 on the Recentered SAT I taken after April 1, 1995; or below 38 on the ASSET (American College Testing Program’s Assessment of Skills for Successful Entry and Transfer) Intermediate Algebra test or below 41 on the COMPASS test, must successfully complete the developmental (pre-college level) mathematics course or courses as stated below. Students must earn a grade of “C” or better in these courses before enrolling in college level mathematics courses. Students with:

- ACT Math scores in the 0-16 range (or ASSET/SAT/COMPASS equivalencies)
- ACT Math scores in the 17-18 range (or ASSET/SAT/COMPASS equivalencies)

ENROLL IN MATH 0003, DEVELOPMENTAL ALGEBRA

English Composition
Students scoring below 19 on the English section of the Enhanced ACT; or below 470 on the verbal portion of the SAT; or below 400 on the SAT II Subject Test in Writing; or below 45 on the Advanced Placement College Board Test in English; or below 465 on the ASSET Language Usage test or below 75 on the COMPASS test, must successfully complete the developmental course or courses in English composition as stated below. Students with:

- ACT English scores in the 0-13 range (or SAT/ASSET/COMPASS equivalencies)

ENROLL IN UC 0003, LANGUAGE DEVELOPMENT (and successfully...
complete the course before advancing to the next level—concurrent enrollment in ENG 0002 and 1003)
ACT English scores in the 14-18 range (or SAT/ASSET/COMPASS/ equivalencies)
ENROLL IN ENG 0002, WRITING TUTORIAL, concurrently with ENG 1003,
Freshman English I.

*NOTE: Students must earn a grade of "C" or better in Freshman English
I before taking Freshman English II.

Reading
Students who score below 19 on the Reading section of the Enhanced ACT, or below 340
on the verbal section of SAT taken before April 1, 1995; or below 469 on the Recentered SAT
I taken after April 1, 1995; or below 43 on the ASSET Reading Skills test or below 82 on the
COMPASS test, must enroll in the developmental course stated below.
UC 0023, DEVELOPMENTAL READING

ENROLLMENT IN DEVELOPMENTAL COURSES
When an entering freshman student’s composite ACT score or subject ACT score,
SAT score, ASSET score, TSWE score, or COMPASS score requires the student’s
enrollment in a developmental course(s) in accord with the Arkansas State Board of
Higher Education Policy, enrollment in the lowest level developmental
course(s) shall be mandatory for the student’s first semester of enrollment at
Arkansas State University. Students not successfully completing the developmental
courses in their first year at Arkansas State University will not be eligible to
enroll by telephone or web. They must go to University College for advisement and
permission to register. Also, they will be required to enroll in the developmental
courses which have not been successfully completed.

TRANSFER STUDENT ADMISSION
Admission Procedures:
(1) Completed application for admission along with a $15.00 non-refundable processing
fee.
(2) Official transcript mailed directly to ASU from each institution previously attended.
[Refer to Transfer Credit Policy for definition of acceptable transfer credit.]
(3) A student currently enrolled and whose final transcript cannot be provided by the
institution until the semester is completed will be evaluated for admission on all work
completed to date. A final, official transcript must be received in order to continue
enrollment for subsequent terms.
(4) Documentation (required by Arkansas Statute) of two immunizations for measles—
rubella and rubeola, if applicant was born after January 1, 1957. The first immuni-
zation must have been administered after the applicant’s first birthday and after 1/
68. The second immunization may be administered no sooner than 28 days after
the first dose.
(5) Proof of registration with the Selective Service (all males 18-25).

Admission/Registration Policy:
- Students with earned cumulative GPAs less than 2.00 will be granted admission
with academic warning if:
  (1) the GPA for the last 12 semester hours is => 2.00 or
  (2) there has been a separation from all academic institutions for at least one
      regular semester.
  (3) the admission was based on an incomplete transcript and the final GPA
      is below a 2.00.
  (4) there has been a successful appeal through the University Admissions
      and Credits Committee.

Permission to register for classes will be granted when final transcripts are received
and evaluated.

Required Assessment and Remediation for Transfer Students
Students transferring to ASU with less than 61 semester hours must meet the require-
ments of the Arkansas Assessment of General Education (AAE).
Students with fewer than 24 semester hours must show proof of compliance with state-
mandated remediation laws.

Students transferring from State of Arkansas accredited institutions with an Associate of
Arts degree (or other associate degrees meeting the minimum state enhanced general
education core) will have satisfied Arkansas State University’s general education require-
ments. However, specific ASU degree requirements must be met for a bachelor’s degree, i.e.,
certain degrees may require a “C” or higher grade for major and/or other specific courses.
Students admitted with an associate degree will be classified as a junior for registration
purposes.

TRANSIENT STUDENTS
Transient (temporary) students are those who are actively enrolled in other institutions
of higher learning and wish to enroll for a session at Arkansas State University. Admission as
a transient student requires an application, a $15.00 nonrefundable processing fee, proof of
two immunizations against rubella and rubeola, a letter of good standing from the student’s
home institution and proof of registration with the Selective Service (males 18-25). Transient
students wishing to continue at Arkansas State University for more than one academic session
should follow the procedures for admission of transfer students. (See Admission Procedures
on page 22 for more information about immunization documentation.)

NON-DEGREE STUDENTS
Individuals who wish to pursue courses of special interest without submitting academic
credentials may register for a maximum of six hours per semester (or 3 per summer
term), accumulating up to 12 semester hours of undergraduate non-degree credit. Thereafter,
non-degree students must comply with university admission requirements or obtain a written
waiver from the Registrar. CAUTION: Non-degree students should not enroll in courses
that are required in the general education program. Courses taken for non-degree credit
are not applicable toward a degree unless validated later by the student’s meeting all
conditions of admission to the university, including remediation requirements.

Non-degree students are required to submit all admission credentials listed under
“Admission Procedures” except for ACT scores and high school and/or college transcripts.
Non-degree students are required to meet the same course prerequisites as are other
students. Non-degree students are generally not eligible to participate in financial aid
programs.

Due to specific enrollment limitations, non-degree students may not register through the
university’s web registration system.
ADMISSION AND ENROLLMENT OF INTERNATIONAL STUDENTS

Arkansas State University endorses the "NAFSA Principles for International Educational Exchange" developed and published in 1981 by the National Association for Foreign Student Affairs.

A citizen of a nation other than the United States of America wishing to apply for admission to Arkansas State University should write to the Admissions Office, Arkansas State University, P.O. Box 1630, State University, AR 72467 USA. Application forms and instructions will be forwarded by mail. Applicants may also visit our website at www.astate.edu.

The completed application and ALL supporting documentation must be received in the Admissions Office at least three (3) months prior to the desired enrollment date. The applicant will be informed by mail of his/her admission status.

International applicants must provide the following documents:

1. Application and Processing Fee — A formal application for admission, accompanied by a $25.00 (U.S. funds) nonrefundable processing fee payment. Evaluation of academic records and subsequent issuance of the I-20A will not begin before the processing fee is received.

2. Authenticated Copies of all Academic Records — These records should describe the courses of instruction in terms of years spent in school, types of subject matter covered, and grades earned in each subject. Evaluation of the applicant’s transcripts and records must reveal that the academic background is equivalent to high school graduation in the United States. Students seeking to transfer from another university or college must submit official transcripts from those institutions. Students seeking advanced standing for academic coursework completed at foreign institutions must have their transcripts evaluated by an independent agency. For more information, contact the Admissions Office, P.O. Box 1630, State University, AR 72467 USA. Student issued copies of high school/university work may not be accepted.

3. Proof of English Proficiency — This requirement is normally waived for citizens of the British Isles, Australia, the English-speaking portions of Canada, English-speaking portions of the West Indies, and New Zealand. Minimum requirements would be one of the following:
   a. A score of 500 on the paper based TOEFL or 173 on the computer based TOEFL.
   b. A letter grade of C or better in two standard English composition courses at a United States accredited institution of higher learning.
   c. Enrollment in and completion of the Intensive English program at ASU’s Center for English as a Second Language (CESL). Upon CESL’s certification of completion of the advanced level I of language instruction, the student’s proficiency of English will be considered acceptable for undergraduate studies at the university. Additional information on the CESL program is printed on page 27 of this bulletin.
   d. An associate degree from a regionally accredited United States institution of higher learning.
   e. A score of 5 on the International English Language Testing System (IELTS) exam.
   f. A score of “3” on the APIEL (Advanced Placement Program’s International English Language Exam)

4. Financial Affidavit
   A letter of certification (dated not more than six months prior to desired enrollment date) from a reputable financial institution (acceptable to the university) stating that the applicant possesses financial resources of at least $18,600 (U.S.) for each academic year of planned attendance at Arkansas State University. University funds are not available for financial aid to undergraduate students who are not citizens of the United States of America unless they have established resident alien status.

5. ACT Student Profile Report (or SAT scores). This requirement is for students who have fewer than 24 (U.S.) acceptable college/university hours.

6. Two proofs of Immunization Against Measles—Rubeola and Rubella if applicant was born after 1/1/57. The first immunization must have been administered after the applicant’s first birthday and after 1/1/68. The second immunization may be administered no sooner than 28 days after the first dose.

7. International students who reside in countries where tuberculosis (TB) is considered endemic will be required to be tested in the U.S. for TB prior to enrollment in classes at Arkansas State University. TB testing will be available at the ASU Student Health Center for a fee. See the ASU website for a listing of exempt countries.

International students are subject to assessment of additional course work if their academic preparation is deemed inadequate.

International students seeking to transfer from another college or university within the United States must be in good academic standing at that institution and must also submit proof that the U.S. Citizenship and Immigration Services transfer requirements have been met at the previous school.

If determined to be eligible for admission, the student must file with the Office of International Student and Scholar Services proof of adequate medical insurance that includes a repatriation provision, and a signed authorization for emergency medical treatment. At each subsequent enrollment the student must file with the Office of International Student and Scholar Services evidence that the health program is being maintained.

International students must maintain continuous health insurance coverage, including the summer months while attending ASU. All international students are required to enroll in the University’s international student health insurance program. A fee equal to a six-month premium, approximately $336.00, is added to both the fall and spring tuition bills.

READMISSION OF FORMER STUDENTS

Re-entering students who have been in a "non-enrolled" status with Arkansas State University for the past seven years must submit to the Registrar’s Office an application for readmission. Additionally, re-entering students must submit official transcripts for any/all college work completed at other institutions. Students born after January 1, 1957 must provide proof of immunization for measles—rubeola and rubella. The immunization must be given in two stages. The first must be after the first birthday and after 1/1/68. The second vaccine must be at least 28 days after the first. Males age 18-25 must provide proof of registration with the Selective Service.

THE WILSON CENTER FOR ACADEMIC ADVISING AND LEARNING ASSISTANCE

Advisement Services is the primary home for advisement of exploratory (undecided) students at ASU. This office offers walk-in style services Monday through Friday. Students who are seeking a two-year degree at ASU can find special support services located in the center as well. The center is the first stop for students who want to change their major or wish to withdraw from ASU. The center also provides services for students who have been placed on academic suspension or who need to readmit following suspension. Any student regardless of major may contact this office with general advising or other academic questions and concerns.

CENTER FOR ENGLISH AS A SECOND LANGUAGE (CESL)

The Arkansas State University CESL program offers non-English speakers a full-time program in English language skills (speaking, listening, reading, and writing), as well as cultural and academic orientation. The students served include international undergraduate or graduate students who must improve their proficiency in English before attending ASU or another American university as well as others who want to improve their English skills for social or professional reasons, and international residents in the local community.

See the ASU web page (www.astate.edu) for current bulletin information.
Eligibility
Admission to the CESL program is open to anyone 17 years of age or older. No previous English study is required for admission.

Admission Procedure
Those who wish to study in the CESL program must submit to CESL at least one month prior to the anticipated dates of entry into the program:
1. An application for admission;
2. A statement of financial support;
3. A completed health form;
4. A $25.00 application fee; and
5. A $100.00 tuition deposit
6. A photocopy of passport or national I.D. card

Instruction
Students receive intensive English instruction at a level appropriate for them.

Placement: Students are placed in one of four levels based on the results of their diagnostic tests.

Classes: Full-time students attend class 25 hours per week to study grammar, reading, writing, listening, conversation, and study skills. Classes at the advanced level include TOEFL preparation.

Schedule: CESL operates within the university semester system, offering two 8-week terms per semester and one in the summer.

Calendar

<table>
<thead>
<tr>
<th>Term</th>
<th>Initial Exam</th>
<th>Residence Halls Open</th>
<th>Term Ends</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall I 2004</td>
<td>August 20, 2004</td>
<td>August 19, 2004</td>
<td>October 15, 2004</td>
<td></td>
</tr>
<tr>
<td>Fall II 2004</td>
<td>October 13, 2004</td>
<td>December 15, 2004</td>
<td>December 14, 2004</td>
<td></td>
</tr>
<tr>
<td>Spring I 2005</td>
<td>January 10, 2005</td>
<td>January 7, 2005</td>
<td>March 4, 2005</td>
<td></td>
</tr>
<tr>
<td>Spring II 2005</td>
<td>March 7, 2005</td>
<td>May 4, 2005</td>
<td>May 3, 2005</td>
<td></td>
</tr>
</tbody>
</table>

Tuition and Expenses per Term:
Tuition (as of January 2005) $1,767.15 (per term)

In-State Tuition

Tuition and Expenses per Term:
(Students Eligible for In-State Rate Only) $807.00 (per term)
Technology Fee $54.00 (per term)
One-Time Application Fee $25.00 (per term)
Tuition Deposit $100.00 (refundable)
Room & Board (1 term) $940.00 (approx.)

(An entire semester’s room & board will be assessed for any student entering in August or January)

Medical Insurance -6 months (if not privately sponsored) $336.00

*It is also estimated that a single CESL student needs about $125.00 for books and supplies, and $400.00 for personal miscellaneous expenses per term.
*Payment must be made at registration before classes begin.

Costs as listed above are subject to change without notice.

Application Forms or Additional Information
For further information regarding CESL, write or call:
Arkansas State University Phone: (870) 972-2500
Attention: Center for ESL Fax: (870) 972-3892
P.O. Box 249 E-Mail: cesl@astate.edu
State University, Arkansas 72467-0249 Internet: http://cesl.astate.edu
U.S.A.
Fees and Expenses

Students’ fees are payable in full at the beginning of the semester. Students unable to meet this requirement should contact the Office of Finance the first week of the term. Students must clear tuition and fees by the 10th class day to avoid late charges. Those students who fail to clear their accounts will not be permitted to register the following semester. A “hold” will be placed on the student’s record, and information will not be released until all accounts have been paid. (The National Student Clearinghouse will still receive student information.)

THE UNIVERSITY RESERVES THE RIGHT TO CHANGE THE AMOUNT OF FEES AND RELATED POLICIES OR TO ADD NEW ONES AT ANY TIME IF SUCH ACTION IS DEEMED NECESSARY.

Any fee changes are reflected on the ASU web-site at www.astate.edu

<table>
<thead>
<tr>
<th>GENERAL REGISTRATION FEES</th>
<th>Per Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Tuition</td>
<td></td>
</tr>
<tr>
<td>Arkansas Resident</td>
<td>$134.50 per hour</td>
</tr>
<tr>
<td>Non-Resident</td>
<td>$346.50 per hour</td>
</tr>
<tr>
<td>Graduate Tuition</td>
<td></td>
</tr>
<tr>
<td>Arkansas Resident</td>
<td>$170 per hour</td>
</tr>
<tr>
<td>Non-Resident</td>
<td>$430 per hour</td>
</tr>
<tr>
<td>Infrastructure Fee</td>
<td>$4 per hour</td>
</tr>
<tr>
<td>Athletics Fee</td>
<td>$10 per hour</td>
</tr>
<tr>
<td>Student Union Fee</td>
<td>$10 per hour</td>
</tr>
<tr>
<td>Information Technology Fee</td>
<td>$9 per hour</td>
</tr>
<tr>
<td>Library Fee</td>
<td>$2 per hour</td>
</tr>
</tbody>
</table>

NOTE: All students pay a $5.00 Assessment Fee per term. Each student enrolled in 3 or more credit hours will be assessed a $20.00 student activity fee for the Fall and Spring semesters. Students enrolled in 12 or more hours will be assessed a $10.00 yearbook fee for the Fall and Spring semesters.

<table>
<thead>
<tr>
<th>DEGREE CENTER—GENERAL REGISTRATION FEES</th>
<th>Per Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td></td>
</tr>
<tr>
<td>Off Campus Courses, including distance learning classes, per hour:</td>
<td></td>
</tr>
<tr>
<td>Arkansas Resident Undergraduate</td>
<td>$170</td>
</tr>
<tr>
<td>Arkansas Resident Graduate</td>
<td>$195</td>
</tr>
<tr>
<td>Non-Resident Undergraduate</td>
<td>$382</td>
</tr>
<tr>
<td>Non-Resident Graduate</td>
<td>$455</td>
</tr>
<tr>
<td>Undergraduate NHP Support Assessment</td>
<td>$14 per hour</td>
</tr>
<tr>
<td>Undergraduate COB Support Assessment</td>
<td>$14 per hour</td>
</tr>
</tbody>
</table>
See the ASU web page (www.astate.edu) for current bulletin information.
SUMMER 2004—ROOM AND BOARD (per five week term)

<table>
<thead>
<tr>
<th>Residence Hall</th>
<th>Double</th>
<th>Single</th>
<th>Single Deluxe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas Hall</td>
<td>$275.00</td>
<td>$370.00</td>
<td>$380.00</td>
</tr>
<tr>
<td>250 Flex Points</td>
<td>$250.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>300 Flex Points</td>
<td>$275.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>350 Flex Points</td>
<td>$300.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Room and board charges are assessed and payable in full at the beginning of each semester. Students seeking installment arrangements should contact the Student Account Services in the Administration Building (Telephone 910-8220). Students receiving financial assistance that equals or exceeds their total charges are not eligible for installment arrangements.

Refrigerators/Microfridges are available for rent in the Residence Life office. Refrigerators for Fall/Spring are $30 each semester and $15 a term for the summer sessions or $25 for both Summer terms. Microfridges (refrigerator, freezer, and microwave combination) for Fall/Spring are $60 each semester and $30 a term for the summer sessions.

REFUND OF FEES SCHEDULE

<table>
<thead>
<tr>
<th>Semester</th>
<th>1st - 5th class day</th>
<th>6th - 10th class day</th>
<th>On or after 11th class day</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Week Terms</td>
<td>100%</td>
<td>75%</td>
<td>None</td>
</tr>
<tr>
<td>5-Week Terms</td>
<td>First and second day</td>
<td>Third and fourth day</td>
<td>None</td>
</tr>
<tr>
<td>5-Week Terms</td>
<td>On or after 5th class day</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Students eligible for refund should contact Student Account Services (870-910-8220) when the drop or withdrawal process has been completed.

COLLEGIATE PARK

<table>
<thead>
<tr>
<th>Apartment Type</th>
<th>Fall &amp; Spring</th>
<th>Summer I &amp; II 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monthly</td>
<td>Semester</td>
</tr>
<tr>
<td>2 Bedroom/ 2 Bath</td>
<td>$370.00</td>
<td>$1,665.00</td>
</tr>
<tr>
<td>2 Bedroom/ 1 Bath</td>
<td>$340.00</td>
<td>$1,530.00</td>
</tr>
<tr>
<td>4 Bedroom Townhouse</td>
<td>$320.00</td>
<td>$1,440.00</td>
</tr>
<tr>
<td>4 Bedroom 2 Bath</td>
<td>$280.00</td>
<td>$1,260.00</td>
</tr>
</tbody>
</table>

INDIAN VILLAGE

<table>
<thead>
<tr>
<th>Apartment Type</th>
<th>Fall &amp; Spring (per semester)</th>
<th>Summer I &amp; II 2005 (per Term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houses</td>
<td>$410.00</td>
<td>$1,845.00</td>
</tr>
<tr>
<td>Stella Apts. Duplex</td>
<td>$350.00</td>
<td>$1,575.00</td>
</tr>
<tr>
<td>Stella Apts. Fourplex</td>
<td>$330.00</td>
<td>$1,485.00</td>
</tr>
</tbody>
</table>

INDIAN VILLAGE APARTMENTS

<table>
<thead>
<tr>
<th>Apartment Type</th>
<th>Monthly</th>
<th>Spring Semester (per Term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bedroom</td>
<td>$485.00</td>
<td>$2,182.50</td>
</tr>
<tr>
<td>2 Bedroom</td>
<td>$575.00</td>
<td>$2,587.50</td>
</tr>
<tr>
<td>3 Bedroom</td>
<td>$650.00</td>
<td>$2,925.00</td>
</tr>
</tbody>
</table>

Add $25 per month for a two bedroom apartment with washer/dryer connections.

Rent (except Stella Apartments) includes all utilities, internet connection, cable, and local phone services. The Apartments will be open during all break periods.

HOUSING FOR FAMILIES AND GRADUATE STUDENTS

Housing is available for married students with children, single parents, graduate students, and non-traditional undergraduates who are at least 26 years of age. Indian Village consists of 50 two-bedroom houses and 100 apartment units. The houses are furnished with a stove, refrigerator, two ceiling fans, and washer/dryer hook-ups. The apartments are available in one, two and three bedroom configurations. The apartments are furnished with a stove, refrigerator, ceiling fans, dishwasher, and central heat and air.

The houses and Indian Village Apartments are designed to offer affordable, comfortable, and accessible living accommodations to the students and their families. A laundry is located in Indian Village for those wishing to take advantage of this service. Application forms and additional information can be obtained from the Office of Residence Life, P.O. Box 2774, State University, AR 72467.

See the ASU web page (www.astate.edu) for current bulletin information.
Academic Policies and Regulations

STUDENT RESPONSIBILITY FOR MEETING GRADUATION REQUIREMENTS

Each student should thoroughly study this Undergraduate Bulletin and become completely familiar with the organization, policies, and regulations of the university. Failure to do this may result in serious mistakes for which the student shall be held fully responsible.

Through a system of academic advising, Arkansas State University assists each student in planning academic programs, developing course schedules, anticipating graduation requirements, and making decisions affecting educational growth and development. The student is urged to consult an academic adviser each registration period to review policies and degree requirements. Academic advisers endeavor to provide such assistance in a timely and accurate manner, but meeting requirements for graduation is the responsibility of the student.

ASSESSMENT

Arkansas State University (ASU) is dedicated to providing quality academic programs; therefore, assessment for improvement of academic programs is of primary importance to the university. ASU is in compliance with Act 874 of the 1993 General Assembly for administration of the Arkansas Assessment of General Education (AAGE). However, many other ongoing assessment activities occur not only in general education, but also in baccalaureate and graduate degree programs.

REGISTRATION

All students are expected to register for classes on the days designated on the Registrar’s web page (www.astate.edu) for a given term. Students may enroll through the first week of classes during a semester, or the first day of a five-week term.

Registration is accomplished through accessing the university’s web system. Registration is scheduled on a priority basis according to student classification, which is determined by the number of semester credit hours students have completed plus the number of hours in which students are currently enrolled.

STUDENTS ARE STRONGLY ENCOURAGED TO CONSULT AN ACADEMIC ADVISER BEFORE REGISTERING FOR CLASSES.

Also, students should be aware that, once they have registered for classes, tuition fee charges will be generated for those courses for which they have registered. Students who register and later decide not to attend should withdraw from their classes prior to the start of the semester to avoid tuition and fee assessment. (SEE NOTES 1 AND 2 BELOW).

(Note 1. See REFUND OF FEES SCHEDULE for charges applicable for withdrawals after classes begin, p. 35.)

(Note 2. Instructions for withdrawing are available on the ASU website or from Advising Services at 972-3001).

STUDENT ACADEMIC LOAD

The maximum academic load for students with less than a 3.500 GPA shall not exceed 18 hours per semester, 14 hours during the summer term, which includes any combination of five- or ten-week courses, (Internet or correspondence courses are inclusive and/or other courses no matter how delivered or where taken.), or 3 hours in an interim. However, a one hour overload is permitted during the last enrollment period (semester or five week term) if the one hour overload will complete graduation requirements.

Students holding a cumulative grade point average of 3.50 or above may request permission of the dean of their college to schedule up to 21 hours in a semester and 14 hours total in the two five-week summer terms combined. (This policy is applicable only on a five-
Students should enroll for no more than fifteen semester hours on a three-day schedule (MWF), or no more than twelve semester hours on a two-day schedule (TTh).

The total academic load resulting from concurrent enrollments at Arkansas State University and other institutions shall not exceed the maximum loads stated above. Correspondence, off-campus or ten-week courses are to be included when computing academic load for each enrollment period.

CHANGES IN SCHEDULE
Changes in class schedules may be made by the web during the scheduled registration periods. Students will not be permitted to add new courses after the first week of classes of a semester or the first class day of a five-week summer term.

STUDENTS SHOULD CONSULT WITH THEIR ACADEMIC ADVISER BEFORE CHANGING CLASS SCHEDULES. STUDENTS RECEIVING FINANCIAL AID OR SCHOLARSHIP SHOULD ALSO CONSULT THEIR FINANCIAL AID COUNSELOR.

DROPPING INDIVIDUAL COURSES: DEADLINES
The final date for dropping individual courses is the last day of the tenth week of classes in a semester, the thirty-eighth class day in a ten-week term (class that spans two five-week terms), the twenty-sixth class day in an eight-week term, the seventeenth class day in a five-week term, the tenth class day in a three-week term. (See DEADLINES, page 10. Deadlines are also published on the Registrar's web page (www.astate.edu) for each semester.)

WITHDRAWAL FROM THE UNIVERSITY
(See Refund of Fees Schedule—See Page 35)
Students may withdraw from the university by the web at any time during the scheduled registration periods.

Students withdrawing from the university after Sunday of the first full week of classes in a semester or Friday of the first week of classes in a five-week summer term must obtain an Application for Withdrawal at the office of Advisement Services. Advisement Services advisers will assist students in the process to obtain withdrawal approval from the offices of Student Accounts, Financial Aid, Residence Life and the Library. The completed application must be returned to Advisement Services by the application nullification date. This process must be completed two business days prior to the beginning of the final examination period. Grades earned in courses completed prior to official withdrawal from the university (i.e., short courses) will not be affected by that withdrawal. Classes that have been withdrawn will remain on the student's transcript with a "W" grade for withdrawal. Once the withdrawal process is complete, the classes withdrawn will not affect the student's GPA.

Students who cease to attend classes without processing an official withdrawal, or who do not complete the withdrawal process will automatically receive an F in all courses in which they were enrolled.

Students Activated for Military Service
Arkansas code § 6-61-112 provides the following for students called into full-time military duty during an academic semester.

(a) When any person is activated for full-time military service during a time of national crisis and therefore is required to cease attending a state-supported postsecondary educational institution without completing and receiving a grade in one or more courses, the following assistance shall be required with regard to courses not completed.

1. Such student shall receive a complete refund of tuition and such general fees as are assessed against all students at the institution.

(A) Proportionate refunds of room, board, and other fees which were paid to the institution shall be provided to the student, based on the date of withdrawal.

(B) If an institution contracts for services covered by fees which have been paid by and refunded to the student, the contator shall provide a like refund to the institution.

(b) If the institution has a policy of repurchasing textbooks, students shall be offered the maximum price, based on condition, for the textbooks associated with such courses.

(c) When a student is required to cease attendance because of such military activation without completing and receiving a grade in one or more courses, the institution shall provide a reasonable opportunity for completion of the courses after deactivation.

(d) A student activated during the course of a semester shall be entitled, within a period of two years following deactivation, to free tuition for one semester at the institution where attendance had been interrupted unless federal aid is made available for the same purpose.

To prevent students who are receiving veteran's benefits from being penalized and having to repay such benefits, students activated during an academic semester who have not completed sufficient course requirements for the awarding of a grade must withdraw from the university. Students should contact the VA representative in the Office of the Registrar immediately upon notification of activation to initiate the withdrawal process.

ADVANCED PLACEMENT CREDIT
The university awards credit to students who participate in their high school Advanced Placement (AP) Program administered by the College Board Placement Test Program. Students who wish to obtain Advanced Placement credit must request the College Board to forward their test scores to Arkansas State University after they have been admitted. Students will be awarded credit in the courses listed below, provided they make satisfactory scores on appropriate AP examinations and meet other requirements designated by the department offering the course.

<table>
<thead>
<tr>
<th>Advanced Placement Exam</th>
<th>Minimum AP Score for Credit</th>
<th>ASU Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>American History</td>
<td>3</td>
<td>HIST 2763</td>
</tr>
<tr>
<td>American History</td>
<td>4</td>
<td>HIST 2763 &amp; HIST 2773</td>
</tr>
<tr>
<td>Aural Perception</td>
<td>3</td>
<td>MUS 1411</td>
</tr>
<tr>
<td>Aural Perception</td>
<td>4</td>
<td>MUS 1411 &amp; MUS 1421</td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>BIOL 1003</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>BIOL 1003 &amp; BIOL 1001</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>4</td>
<td>MATH 2204</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>4</td>
<td>MATH 2204 and MATH 2214</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3 (plus departmental validation of lab skills)</td>
<td>CHEM 1013 &amp; CHEM 1011</td>
</tr>
<tr>
<td>English Lit/Comp or Lang/Comp</td>
<td>3</td>
<td>ENG 1003</td>
</tr>
<tr>
<td>English Lit/Comp or Lang/Comp</td>
<td>4</td>
<td>ENG 1003 &amp; ENG 1013</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>3</td>
<td>BIOL 1063</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>4</td>
<td>BIOL 1063 &amp; BIOL 1001</td>
</tr>
<tr>
<td>European History</td>
<td>4</td>
<td>HIST 1023</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3 (plus completion of Intermediate II)</td>
<td>FR 2013 or GER 2013 or SPAN 2013</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
Anyone may take the CLEP tests; however, CLEP credit is not awarded for a course the student has already attempted and been assigned a grade, or if the student has already completed a more advanced course in the subject matter area.

Students who are eligible to receive college credit based upon CLEP examination scores shall have credit recorded without grades or grade points on their permanent record after they have been enrolled at Arkansas State University for a full summer or a semester.

CLEP examination credit earned at other institutions of higher education is transferable to Arkansas State University if the subject is included in ASU’s CLEP credit policy.

Students must bear the cost of CLEP examinations.

**Department Challenge Examinations**

Various academic departments administer challenge examinations in specific courses or on certain subject matter areas upon the request of students enrolled at Arkansas State University. An official form, "Request for Credit by Examination," may be obtained from the Registrar’s Office. Students should contact appropriate deans and department chairs for additional information.

Credit by departmental examination is not awarded for courses the student has already completed, courses less advanced than those already completed, or courses for which a CLEP examination exists.

The student who wishes to take a departmental challenge examination must pay a $50 non-refundable fee prior to taking each examination.

ChALLENGE examinations should be taken prior to the student’s last semester of enrollment preceding graduation.

**RESIDENCY REQUIREMENTS FOR DEGREE COMPLETION**

Students seeking an associate or baccalaureate degree must meet ASU’s residency requirements. Associate degree candidates must complete a minimum of 16 semester hours on the ASU-Jonesboro campus. Baccalaureate degree candidates must complete a minimum of 32 semester hours on the ASU-Jonesboro campus.

**TRANSFER CREDIT POLICY**

Students who present transcripts of college-level credit from regionally accredited and international institutions may receive credit toward a degree to the extent that the grades are equivalent to a C (2.0) average and the subjects are determined to be applicable toward requirements for a degree at the university.

The total number of credit hours of accepted college-level work will be entered on the student’s permanent academic record; however, the transfer credit hours will not be included in the cumulative grade point average reflected on the transcript of academic record.

All transfer work will be evaluated in the Registrar’s Office in cooperation with the appropriate college on the campus.

Students transferring credits from two-year collegiate institutions must complete a minimum of 37 semester hours in accredited senior institutions as a prerequisite to the baccalaureate degree.

**STUDENTS MUST BE ENROLLED AS DEGREE CANDIDATES AT ASU IN ORDER TO HAVE THEIR TRANSFER HOURS ADDED TO THEIR ARKANSAS STATE UNIVERSITY PERMANENT RECORD.**

The Academic Load Policy will govern the number of hours a student may apply toward the academic record when concurrently enrolled at ASU-Jonesboro and other institutions of higher education. ASU-Jonesboro hours will be the hours applied first if more than the maximum number of hours are submitted for approval. Currently enrolled students should not take courses at other institutions without first checking with the advisers regarding the applicability of the courses for ASU credit and to ensure that they do not take inappropriate courses, nonequivalent courses, out-of-sequence courses, courses on the wrong level or an overload for the semester.
CLASS ATTENDANCE POLICY

Students should attend every lecture, recitation, and laboratory session of every course in which they are enrolled. Students who miss a class session should expect to make up missed work or receive a failing grade on missed work. Make-up policy is at the discretion of the instructor.

Students enrolled in freshman or sophomore level courses (numbered 1000 or 2000) may during a semester miss no more than twice the number of lectures, recitations, laboratory sessions, or other regularly scheduled class activities that would normally be scheduled during a week. Students who miss more than the maximum number of freshman or sophomore level classes may be assigned a grade of F for the course. Students who may be assigned a grade of F in a course because of excessive absences may drop the course without penalty before the deadline for dropping an individual course.

In determining whether excessive absences should result in a failing grade, consideration shall be given to the maturity and class standing of the student, the quality of academic work being accomplished by the student, and extenuating circumstances related to such absence.

Students enrolled in junior and senior level courses (numbered 3000 or 4000) will not be assigned a grade of F solely for failing to attend classes. However, instructors shall set forth at the beginning of the semester their expectations with regard to make-up policy for work missed, class participation, and other factors that may influence course grades.

WN - WITHDRAWAL FOR NON-ATTENDANCE

Faculty assign a grade of WN (withdrawal for non-attendance) to students who have never attended a single class during the first eleven class days of the semester. Although faculty assign WN’s, students are responsible for dropping/withdrawing from all classes they are not attending. Students should review their schedule of classes using Web to make sure their enrollment is accurate.

Students who find a mistake need to contact the Registrar’s Office for proper procedures immediately upon discovery. The WN grade will only be granted or may be appealed through the first day of classes of the following fall or spring semester, whichever comes first.

EXCUSED ABSENCE FOR UNIVERSITY-SPONSORED EVENTS

It is the practice of Arkansas State University to allow students to participate in university-sponsored events, even when those events cause them to be absent from class. Students participating in university-sponsored events will be given reasonable opportunities to make up missed assignments and exams.

FINAL EXAMINATIONS

A final examination is a requirement of all courses except those in which written examinations are not used for evaluating student achievement. Courses that might not have final examinations include, for example, laboratory courses, clinical experience courses, student-teaching courses, fine arts performance and studio courses, readings courses, special problems, independent studies, and internships.

Final examination schedules are published on the Registrar’s web page (www.astate.edu) for each semester. Examinations must be given on the dates scheduled. Exceptions may be granted only for individual students in cases of emergency or other compelling circumstances over which the student has no control. Exceptions must be approved by the dean of the college in which the course is offered.

CLASSIFICATION OF STUDENTS

Beginning students are classified as freshmen; students with 30-59 hours of credit as sophomores; students with 60-89 hours of credit as juniors; and students with 90 or more hours of credit as seniors.

COURSE NUMBERING SYSTEM

Each course is designated by a number composed of four digits and each course number carries the following information: The first digit indicates the course level (0-no degree credit, 1-freshman, 2-sophomore, 3-junior, 4-senior), and the fourth digit indicates the number of semester hours of credit.

The listing of course numbers in descriptions of courses for each college includes the current four-digit number (and the old five-digit number in parentheses).

COURSE PREREQUISITES

No student may enroll in a course before successfully completing the prerequisites to that course. Prerequisites to a course are noted following the description of the course.

FREQUENCY OF COURSE OFFERINGS

A frequency-of-course-offering statement appears at the end of each course description in the college/departments. The information reflects the normal scheduling of the course. However, circumstances may from time to time dictate scheduling changes, and the university reserves the right to make such changes when necessary.

Students should check in advance with department chairs concerning offerings about which they may have a question.

The code symbols are as follows:

- F fall semester every year
- F-even fall semester even-numbered years
- F-odd fall semester odd-numbered years
- S spring semester every year
- S-even spring semester even-numbered years
- S-odd spring semester odd-numbered years
- SU summer terms
- D upon demand (with sufficient enrollment)

GRADES AND GRADING SYSTEM

Students have access to view official grades at the end of each semester and each summer term in which they are enrolled.

Arkansas State University is on a four-point grading system. The grading system includes permanent letter grades and grade point values as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>excellent; for outstanding achievement</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>good; for less than outstanding but demonstrating better performance than the normal competency required for satisfactory progress toward graduation</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>satisfactory; for performance that demonstrates the normal competency required for satisfactory progress toward graduation</td>
<td>2</td>
</tr>
</tbody>
</table>

Credit hours are those earned at the university and do not include thesis, internship, clinical, or dissertation work.

A final grade of D, D-, or F may not be used as a satisfactory grade for credit toward a degree.

In determining whether excessive absences should result in a failing grade, consideration shall be given to the maturity and class standing of the student, the quality of academic work being accomplished by the student, and extenuating circumstances related to such absence.

Final examination schedules are published on the Registrar’s web page (www.astate.edu) for each semester. Examinations must be given on the dates scheduled. Exceptions may be granted only for individual students in cases of emergency or other compelling circumstances over which the student has no control. Exceptions must be approved by the dean of the college in which the course is offered.

Transfer of English Composition courses will not be accepted from international institutions. This policy is normally waived for citizens of the British Isles, Australia, the English speaking portions of Canada and New Zealand.

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
Requirements to be satisfied by a student prior to requesting academic clemency toward an undergraduate degree are as follows:

1. *separation from all academic institutions for at least five years, and then
2. completion of a minimum of twelve degree hours of credit courses from a regionally accredited institution of higher education with a 2.0 or better grade point average, and
3. formal application filed with the registrar.

*Transcripts showing attempted enrollment ending in withdrawals are not considered to be separation.

Upon approval by the Registrar’s Office, the student will be granted academic clemency. The student’s permanent record will remain a record of all work; however, the student will forfeit the use—for degree purposes at Arkansas State University—of any college or university credit earned regardless of where the credit was earned prior to the five years separation indicated above. The date of the clemency will coincide with the date of re-entry following the prolonged separation, and the permanent record will note that a fresh start was made and will note the date of the fresh start. The record will carry the notation, “Academic Clemency granted - (date of fresh start).”

A student requesting academic clemency will pay a fee of $30 to the Registrar’s Office.

HONOR ROLL
An honor roll consisting of the President’s List and the Dean’s List is published at the close of each semester. In order to qualify, students must complete a minimum of twelve semester hours of degree-credit courses.

President’s List: Full-time students whose grade point average for the semester is within the range of 3.80 to 4.00.

Dean’s List: Full-time students whose grade point average for the semester is within the range of 3.60 to 3.79.

GRADUATION WITH ACADEMIC DISTINCTION/HONORS
Arkansas State University recognizes the academic achievement of graduating baccalaureate-degree students in the following ways:

1. Students with a grade point average of 4.00 on all work attempted and if transfer students, on all Arkansas State University work, shall be designated as graduating summa cum laude.

2. Students with grade point averages of 3.80-3.99 on all work attempted, and, if transfer students, on all Arkansas State University work, shall be designated as graduating magna cum laude.

3. Students with grade point averages of 3.60-3.79 on all work attempted, and, if transfer students, on all Arkansas State University work, shall be designated as graduating cum laude.

NOTE: To receive any of the above designations, students must be seeking their first baccalaureate degree. Students must have completed at least 45 semester hours of graded course work offered by Arkansas State University. Semester hours completed and grade points earned during the student’s last enrollment prior to graduation are excluded when determining academic distinction.

4. Students who complete the Honors Program or the University Honors Program shall be designated as graduating “In Honors” or “In University Honors.”

WILSON AWARD
The Wilson Award is presented annually to the university’s outstanding graduating senior. The recipient is selected on the basis of character, determination, involvement, and academic achievement. This honor is bestowed in memory of R.E. Lee Wilson, a member of the Arkansas State University Board of Trustees from 1917 until his death in 1933.

ACADEMIC GOOD STANDING
Academic Good Standing at ASU occurs when a student achieves a minimum cumulative GPA of 2.000 (C average). The number of semester hours completed includes all college work done by the student. However, only those grades earned at Arkansas State University are used in computing the GPA. Academic Good Standing status allows for continued enrollment in the university and eligibility for participation in various university activities. Although students who are placed on academic suspension and participate in the Restart@state student success program do not meet the required GPA for academic good standing, the continued enrollment privilege provided by this program allows students to continue eligibility for participation in university activities.

ACADEMIC PROBATION AND SUSPENSION
Students entering ASU for the first time are under the retention policy listed below:

1. Students will receive academic probation at the close of any enrollment period (fall or spring semester) when their current semester or ASU cumulative grade point average (GPA) is below 2.00. Academic probation status will be removed at the end of any enrollment period when both the current semester and ASU cumulative GPA are 2.00 or above. Students receiving academic probation are strongly encouraged to counsel with an academic adviser.

2. Students on academic probation will be suspended for poor scholarship when their current semester and fall or spring ASU cumulative GPA are both below the required 2.00. Students suspended for poor scholarship may apply for readmission under SCHEDULE OF READMISION FOLLOWING ACADEMIC SUSPENSION.

**Exception:** Academic eligibility for summer enrollment will not be affected by the academic status at the close of the spring semester; however, academic performance during the summer may be considered when determining readmission for the fall semester.

READMISSION FOLLOWING ACADEMIC SUSPENSION

**First Suspension:** Students may seek immediate yet conditional enrollment by making application to the Restart@astate Program through the Office of Advisement Services. Successful completion of program requirements will lead to normal admission the subsequent semester.

**Second Suspension:** With approval of the Advisement Services, students will be granted conditional or automatic readmission after one regular semester on suspension.

**Third and Subsequent Suspensions:** With approval of the Advisement Services, students will be granted conditional or automatic readmission after two regular semesters on suspension.

Students may contact Advisement Services to review the terms for admission through participation in the Restart@state Program.

Arkansas State University will not accept for transfer any credit earned at other institutions during a period the student is on mandatory suspension at ASU.

ACADEMIC RECORDS PRIVACY RIGHTS

As a general rule, a student’s academic record is confidential and will not be released to unauthorized persons without written approval from the student. The following items are considered public information and may be made available upon inquiry unless the student requests nondisclosure for the enrollment period: name, address, phone number, E-mail address, enrollment status, classification (FR, SO, JR...), major degrees obtained and dates conferred, dates of attendance, academic, and non-academic honors.

Requests for nondisclosure are effective until the student notifies the Registrar’s Office that the request is to be voided. Voiding the original nondisclosure request may be accomplished in a personal request directly to the Registrar’s Office.
Arkansas State University intends to comply fully with the Family Educational Rights and Privacy Act (FERPA) of 1974 which was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with FERPA office concerning alleged failures by the institution to comply with the Act.

Questions concerning the Family Education Rights and Privacy Act should be referred to the Registrar's Office.

UNIVERSITY GENERAL REQUIREMENTS FOR ALL ASSOCIATE DEGREES
Each candidate for an associate degree must meet the following general requirements:

1. Complete HIST 2763, or HIST 2773, or POSC 2103 to satisfy the Arkansas requirement of American history or government.

2. Complete the curriculum as listed under the description of each associate degree program, with a minimum of 62 semester hours.

3. Twelve (12) of the last 18 semester hours must be Arkansas State University work, and the student must meet ASU's residency requirement by completing at least 16 semester hours on the ASU-Jonesboro campus. Exceptions to the "12 of the last 18" regulation may be granted by the dean of the college in which the student is majoring.

A maximum of 25 percent of an associate degree program may be earned through examination (including CLEP), correspondence, evaluated military service credits, and USAFI courses. Students may submit a maximum of 15 CLEP-credit hours toward an associate degree. (Arkansas Act 88 of 1979 exempts nursing students from these maxima. Confer with the Chair, Department of Nursing for information.)

4. Earn a grade of C or better in ENG 1003 and ENG 1013.

5. Initiate an INTENT TO GRADUATE form and pay the graduation fee when registering for the final enrollment period before completing all degree requirements (If the student is unable to graduate at the end of the semester for which application has been made, a new INTENT TO GRADUATE form must be filed during the next semester in which the student expects to graduate. If the graduation fee has already been paid, you DO NOT have to repay the fee). An official record of correspondence or transfer work completed at another institution must be on file in the Registrar's Office at Arkansas State University at least three weeks before the degree is to be granted.

6. Have an average of C or better on all work attempted, on work in the major field, and, if a transfer student, on all work taken at this institution.

7. Complete graduation requirements under the provisions of an ASU-Jonesboro catalogue that is not more than seven years old at the time of the student's graduation, provided the student was enrolled in residence at a regionally accredited institution of higher education during the year the catalogue was in effect.

UNIVERSITY GENERAL REQUIREMENTS FOR ALL BACCALAUREATE DEGREES
Each candidate for a baccalaureate degree must meet the following general requirements: (Some ASU colleges have additional specific "general" requirements.)

1. Complete the General Education curriculum, with substitutions/additions listed under the description of each degree program. (Transfer students see note under General Education Curriculum for Baccalaureate Degrees on pages 78-79.)

2. Meet the English proficiency requirement. Complete ENG 1003 with a grade of C or better before enrolling in ENG 1013. Complete ENG 1013 with a grade of C or better. Students who are not pursuing a teacher education degree (B.S.E./B.M.E./B.S.A. (Ag.Ed.)) and who have earned lower than C in ENG 1013 may satisfy the requirement by repeating the course with a C or better, OR by passing the English Proficiency Essay after completing 62 degree-credit hours, OR by earning a passing grade in an upper-level English writing course.

3. Complete HIST 2763, or HIST 2773, or POSC 2103 as stated in General Education Curriculum to satisfy the Arkansas requirement of American History or American Government.

4. Eighteen (18) of the last 24 semester hours must be Arkansas State University work. Exceptions may be granted by the dean of the college in which the student is majoring, when conditions stated below are met.

   1) The student must have met ASU's residency requirement by completing 32 semester hours on the ASU-Jonesboro campus.

   2) The student must have earned at least 90 hours at ASU and/or institutions having a formal articulation agreement with ASU.

   3) The remaining course work must be completed at a regionally accredited baccalaureate-degree-granting institution.

   A maximum of 25 percent of a baccalaureate degree program may be earned through credit by examination (including CLEP) advanced placement, correspondence, evaluated military service credits, and USAFI courses. Students may submit a maximum of 90 semester hours earned through credit by examination. (Arkansas Act 88 of 1979 exempts nursing students from these maxima. Confer with the dean of the College of Nursing and Health Professions for information.)

5. Complete a minimum of 124 semester hours (additional hours may be required by the various colleges for particular majors) and meet the requirements for a degree as outlined in the respective colleges' requirements. NOTE: Students transferring from two-year collegiate institutions must complete a minimum of 57 semester hours in accredited senior institutions as a prerequisite to the baccalaureate degree.

6. Complete a minimum of 45 semester hours of junior-senior level courses after earning 30 degree credit hours. (UPPER LEVEL COURSES COMPLETED BY A STUDENT BEFORE HE/SHE HAS EARNED 30 DEGREE-CREDIT HOURS CANNOT BE COUNTED AS JUNIOR-SENIOR CREDIT.)

7. Initiate an INTENT TO GRADUATE form and pay the graduation fee when registering for the final enrollment period before completing all degree requirements. August graduates should initiate an INTENT TO GRADUATE form and pay graduation fee when registering for first summer term. (If the student is unable to graduate at the end of the semester for which application has been made, a new INTENT TO GRADUATE form must be filed during the next semester in which graduation is planned. If the graduation fee has already been paid, you DO NOT have to repay the fee). An official record of correspondence or transfer work completed at another institution must be on file in the Registrar's Office at Arkansas State University at least three weeks before the degree is to be granted.

8. Have an average of C or better on all work attempted, on work in the major field, on work in the minor field if one is completed, and, if a transfer student, on all work taken at this institution. (These are minimum grade averages and some colleges on the campus will require higher averages.)

9. Complete graduation requirements under the provisions of an ASU-Jonesboro catalogue that is not more than seven years old at the time of the student's graduation, provided the student was enrolled in residence at a regionally accredited institution of higher education during the year the catalogue was in effect.

MAJORS AND MINORS
All degree programs, except those for the Associate in General Studies and the Bachelor of Science in Interdisciplinary Studies, require students to complete an academic major. Additionally, students may complete academic minors. Academic minors are required in some colleges and are recommended in all colleges. Some restrictions on minors may be imposed by academic departments and colleges. Requirements for academic majors and

See the ASU web page (www.astate.edu) for current bulletin information.
minors are listed as departmental programs. A list of academic majors and minors offered by Arkansas State University is shown on pages 67-70. Minors must be completed at the same time the baccalaureate degree is completed. A minimum GPA of 2.00 is required for a minor unless otherwise specified.

**REQUIREMENTS FOR A DOUBLE MAJOR**

Students who seek a double major or students working concurrently on a second baccalaureate degree, MUST meet the requirements of both degrees and majors under the provisions of the ASU bulletin in effect during the student's enrollment in college. Double majors must be completed at the same time. Work completed after the awarding of the first baccalaureate degree may be applied to a second baccalaureate degree under the terms listed in the Requirements For An Additional Baccalaureate Degree.

**REQUIREMENTS FOR AN ADDITIONAL BACCALAUREATE DEGREE**

Students who wish to complete additional baccalaureate degrees in other fields of study must satisfy the following requirements:

- Complete graduation requirements under the provisions of an ASU-Jonesboro catalogue that is not more than seven years old at the time of the student’s graduation, provided the student was enrolled in residence at a regionally accredited institution of higher education during the year the catalog was in effect.
- Meet the residency requirements.*

*If the first degree was awarded by ASU, the student will complete the remaining degree requirements in residence.

If the first degree was NOT awarded by ASU, the student must complete a minimum of 32 hours in residence at ASU (residency requirement) and meet the requirements of the degree sought.

Regardless of where the first degree was awarded, students must have completed ENG 1003 and ENG 1013 with a 'C' or better and HIST 2763 or HIST 2773 or POSC 2103 (or equivalent courses).

**NOTE:** Academic ranking and academic honors designations are applicable to the first baccalaureate degree only.

**NOTE:** GPA calculation is based on all ASU-Jonesboro work including the first degree earned.

---

**Services for Students**

Every residential campus is a city unto itself; and, like any other city of similar size and complexity, Arkansas State University seeks to respond to the hierarchy of service and developmental needs of its citizens. Services for Arkansas State University students are provided through many different offices and departments of the university.

**OFFICE OF STUDENT AFFAIRS**

The Office of Student Affairs at Arkansas State University is under the leadership of the Vice Chancellor for Student Affairs. The goals of the Office of Student Affairs are to assist students in eliminating obstacles which interrupt their educational progress and to broaden students’ opportunities for personal, social, cultural, and intellectual development within the campus environment. Some specific objectives are (1) to improve the students’ basic skills required for the selection and achievement of educational goals, (2) to assist students in their selection and pursuit of career and vocational choices, (3) to provide direction and guidance for students in their personal, social, and cultural growth and development, and (4) to provide services that respond to the unique needs of specific groups within our diverse population and to the demands and responsibilities of campus life. Personnel in different areas of Student Affairs work cooperatively toward the achievement of these goals and objectives. The Vice Chancellor for Student Affairs is located in the Administration Building.

**OFFICE OF INTERNATIONAL STUDENT AND SCHOLAR SERVICES**

The Office of International Student Services acts as a liaison between the international students at Arkansas State University and all those with whom these individuals come into contact, representing the students’ best interest and advising them accordingly. The staff provides informational programs and services designed to make the international students' ASU experience as productive as possible. It offers an orientation for arriving students, assistance with the various facets of acculturation, personal counseling, and immigration advising to help students maintain legal status with the Department of Homeland Security. The Office sponsors workshops and monthly social programs and prepares a monthly newsletter to keep international students informed about those topics of particular interest to them. Staff members also work with the International Student Association, and other groups of international students, to plan and promote social activities and cross-cultural programs. International Student and Scholar Services is located in Room 2064B of the Student Union.

**OFFICE OF INTERNATIONAL PROGRAMS**

The Office of International Programs (OIP) is responsible for advising students, faculty, and staff on international educational opportunities abroad. It also administers international exchange programs, assists in recruitment of international students, serves as campus Fulbright advisor, and oversees the Center for English as a Second Language (CESL). Short-term study programs, frequently offered during Spring Break or the summer, can be arranged for individuals, small student groups, or University classes. Semester and year-long exchanges allow students to experience in more depth another culture while continuing to make regular progress toward a degree, and thanks to special agreements, can cost little more than the same period of study on the Jonesboro campus.

Programs exist for students in several majors, including business, agriculture, the visual arts, political science, history, languages, and others. Courses in many of these areas are available in English. Currently, ASU has in place, or is developing, exchanges and short-term programs in the following countries:

- Austria
- China
- Finland
- Iceland
- The Netherlands
- Belgium
- Costa Rica
- France
- Italy
- Russia
- Brazil
- England (UK)
- Germany
- Jordan
- Spain
- Thailand

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
FUTURE DELTA LEADERS SERVICE SCHOLARSHIP

- Must be an incoming freshman graduating from one of the accredited Arkansas Delta high schools
- One of the following: ACT score of 20-23 or SAT score of 950 to 1109
- High school cumulative grade point average of a minimum of 3.000 on a 4.000 scale
- Proven leadership in grades 9-12 including leadership in school clubs, community involvement and volunteerism
- Two recommendation letters referencing the student’s past leadership activities and potential for future leadership in service to the Delta region
- Recipients selected on a competitive basis.

Award Amount
$1,000 per semester up to a total of eight semesters
Must begin using the scholarship the fall semesters after high school graduation
This scholarship does not combine with the ASU Incentive award or an ASU tuition scholarship

Renewal
Renewable up to eight total semesters provided the recipient successfully completes a minimum of 12 hours each semester and maintains a 2.500 cumulative GPA. All coursework must be completed on the ASU-Jonesboro campus.

Application Procedure
Submit the application by February 15 with the following:
- Two recommendation letters sent from high school teachers, counselors, principal or community leader
- High school seven-semester transcript
- ACT/SAT score verified by the counselor on the scholarship application

Deadline
February 15

See the ASU web page (www.astate.edu) for current bulletin information.
citizens by civil and criminal law, and the university reserves the right to discipline students to secure compliance with these higher obligations.

Students are expected to conduct themselves in an appropriate manner and conform to standards considered to be in good taste at all times. This implies a consideration of the welfare and reputation of the university and other students enrolled at the university. Students exhibiting behavior problems not compatible with good citizenship can expect to be reprimanded, have certain restrictions imposed or, in extreme cases, be denied the privilege to continue as students.

The university maintains a Code of Conduct which is printed in the Student Handbook covering specific conduct and due process issues. All students are expected to know and observe these rules and regulations.

STUDENT HEALTH CENTER & PHARMACY

ASU’s Student Health Center (SHC) is like a primary care doctor’s office whereby students can be seen for minor illnesses, injuries, immunizations, and general physical exams as well as specific female and male exams, and chronic health conditions. There are two nationally certified Advanced Nurse Practitioners, a registered Nurse Health Educator, a part-time Pharmacist, and part-time Pharmacy Technician. Athletic Training, Health Promotion, and Nursing students rotate through the clinic.

The SHC is located on Stadium Blvd. adjacent to First Care and the Sports Medicine facilities. Our entrance faces the Football stadium parking lot. The ASU Pharmacy is located within the SHC building and has limited hours of operation. In order to have a prescription filled at the pharmacy, you must see one of the clinicians on staff at the SHC and/or a clinician that is an approved affiliated members of the SHC. The SHC is open Monday through Friday, from 8 a.m. to 5 p.m. The SHC prefers for students to call to make an appointment with one of the Family Nurse Practitioners or Nurse Educator, however, walk-ins may be accepted. The clinicians and pharmacist usually take a lunch break from noon to 1:00 p.m.

If a student should become ill or injured during the hours the center is not open, he or she may go to the First Care Acute Care Center that is adjacent to the SHC, or to one of the local emergency rooms at St. Bernard’s Regional Medical Center or Regional Medical Center of Northeast Arkansas. There are other Urgent Care Walk-in Clinics also available in the city limits of Jonesboro.

If an ambulance is needed from the residence halls, please contact a staff member in order to ensure proper and quick service. Arkansas State University does not assume responsibility for payment of emergency room fees, prescription, or outside test (x-rays, labs, etc.)

The university offers each student the opportunity to purchase an accident and hospitalization insurance policy as part of a group consisting of ASU students enrolled in other universities across the state. Membership in the group is voluntary. This insurance is provided by a reputable insurance company, and the university assumes no responsibility for collecting premiums or for paying claims. Unless a student has insurance coverage under a family policy, it is recommended that this policy be considered. Brochures may be obtained at the SHC.

RESIDENCE HALL GOVERNANCE

The university holds the view that the residence hall setting provides excellent opportunities for student self-governance. Each residence hall has an elected council for implementing this concept. The councils involve residents in the principles of self-government through responsible leadership and also provide programs of interest to the residents.

RESIDENCE LIFE

The Department of Residence Life offers on-campus housing for full-time college students in one of our four residence halls: Arkansas Hall, Kays Hall, Twin Towers, and University Hall. Students who have earned at least sixty hours of college credit can reside in the Collegiate Park apartment complex. Housing is also available for students with families as well as nontraditional (undergraduates who are at least 26 years of age) and graduate students in Indian Village.

All single undergraduate students who have completed fewer than sixty (60) hours and are under twenty-one years of age must live on campus, unless living with parents or immediate relatives.

Any student under twenty-one years of age with fewer than sixty (60) hours who plans to reside off campus in compliance with the above regulation must file an off-campus housing form with the Residence Life Office, P.O. Box 2774, State University, AR 72467. Single rooms are offered on a space-available basis only.

Any inquiries concerning student on campus housing should contact the Office of Residence Life. A $100.00 deposit is required to reserve university housing. To reserve university housing, a $100 deposit and housing application are required.

STUDENT ACTIVITIES BOARD (SAB)
(http://union.astate.edu/involve.html)

SAB plans activities and events for all ASU students with responsibility for some of the largest events on campus, including Welcome Week, Homecoming, ASU Pride Day, Martin Luther King Jr. Celebration, International Week and Springfest. The Board is composed of a president and eight student directors in charge of the following committees: Spirit Club, Special Events, Union Events, Cinematic and Fine Arts, Issues and Awareness, and Cultural Enrichment. SAB welcomes your participation by joining one of its committees—GET INVOLVED!

NEW STUDENT ORIENTATION

This summer program aids all new and entering students in their transition to the university. This program exposes all new students to an array of social and educational opportunities. Students are advised of academic majors and are assisted in their class registration. Parents also enjoy a unique program of events that involves their participation in their student’s collegiate experience.

TESTING CENTER

The ASU Testing Center is certified by Educational Testing Service (ETS), American College Testing (ACT), the Psychological Corporation and several private boards and societies to coordinate the administration and security of standardized testing programs. Through our Testing Center, students seeking admission to specialized undergraduate degree programs or postgraduate programs can take the required exams on any national test date. One program gives students the opportunity to earn college credit-by-exam. The Testing Center also administers exams to individuals from the surrounding communities to certify proficiency in the fields of teaching, contracting, or counseling.

The specific tests administered by the ASU Testing Center are listed below.

- **Credit-by-exam**
  - College Level Exam Program (CLEP)
  - Undergraduate Admission
    - ACT Assessment
    - Test of English as a Foreign Language (TOEFL)**
  - Assessment
    - CAAP-Assessment of General Education
    - PRAXIS I: Pre-Professional Skills Test (PPST)*
    - *offered on computer/paper-pencil
    - **offered ONLY on computer

- **Post-Graduate**
  - Graduate Record Exam (GRE)**
  - Graduate Management Admission Test (GMAT)**
  - Law School Admission Test (LSAT)**
  - Medical College Admission Test (MCAT)
  - Miller Analogies Test (MAT)
  - National Association of Board of Pharmacy (NAPLEX)
  - Pharmacy College Admission Test (PCAT)

- **Occupational Certification**
  - PRAXIS II: Specialty Area Tests
  - PRAXIS II: Multiple Subjects Assessment for Teachers (MSAT)
  - National Counselor’s Exam (NCE)

See the ASU web page (www.astate.edu) for current bulletin information.
VOCA TIO NAL REHABIL ITATION
Persons who have a permanent disability may receive personal and vocational counseling and financial assistance while pursuing their college education. The vocational objective of the disabled person must be approved by a Vocational Rehabilitation counselor.

These services are available through the Division of Vocational Rehabilitation, State Department of Education, Little Rock, AR 72201. Information relative to the program may be obtained from the Student Account Services or the Coordinator for Special Services located in the Office of Student Affairs.

VOLUNTEER SERVICES PROGRAM
The university encourages students to engage in various types of community service opportunities that will enhance their college experience. The program is designed to help college students pursue experiences related to their field of study through volunteer work, as well as provide needed services for individuals and organizations/agencies of the community. Additionally, the Volunteer Services coordinator recruits volunteers who can assist ASU students who have disabilities. In general, student volunteers are referred to appropriate organizations/agencies in the immediate area. Craighead and other surrounding county students receive appropriate training and are provided guidance relative to their volunteer work.

Students may receive course credit for involvement in volunteer work with the approval of a faculty member who has the student in a relevant class. Interested students may assist with the design and selection of the community service task. Options for public service involvement can be explored and/or initiated by a student or an instructor.

Interested students should call the Tribal Leadership Center, 972-2055.

VETERANS ADMINISTRATION BENEFITS
Veterans of recent military service, and the dependents of certain other servicemen, may be entitled to educational assistance payments from the Veterans Administration.

Reservists and members of the National Guard may be eligible for monthly educational benefits.

Arkansas State University is an approved institution for veterans and veterans’ beneficiaries training.

Activities and Organizations

STUDENT GOVERNMENT ASSOCIATION (SGA)
(http://sga.astate.edu)

SGA is your liaison to the administration of Arkansas State University. This vital organization works as an advocate for student interests and concerns, becoming your voice to the University’s faculty, staff, and administrators.

Each college has representation and both undergraduate and graduate students are represented by classification. In addition, the international students and non-traditional students have a senator. These senators and SGA staff members serve on many shared governance committees, representing your concerns in matters as important as financial aid and scholarship, safety, parking and motor vehicle and student disciplinary areas.

For more information on Student Government Association at Arkansas State University, visit the SGA website at http://sga.astate.edu or contact the office at 972-2050.

SOCIAL ORGANIZATIONS

Arkansas State University recognizes nine national sororities and thirteen national fraternities.

<table>
<thead>
<tr>
<th>Sororities</th>
<th>Fraternities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Gamma Delta</td>
<td>Alpha Gamma Rho</td>
</tr>
<tr>
<td>Alpha Kappa Alpha</td>
<td>Alpha Phi Alpha</td>
</tr>
<tr>
<td>Alpha Omicron Pi</td>
<td>Alpha Tau Omega</td>
</tr>
<tr>
<td>Chi Omega</td>
<td>Kappa Alpha</td>
</tr>
<tr>
<td>Delta Sigma Theta</td>
<td>Kappa Alpha Psi</td>
</tr>
<tr>
<td>Delta Zeta</td>
<td>Kappa Sigma</td>
</tr>
<tr>
<td>Phi Mu</td>
<td>Lambda Chi Alpha</td>
</tr>
<tr>
<td>Zeta Phi Beta</td>
<td>Phi Beta Sigma</td>
</tr>
<tr>
<td>Sigma Gamma Rho</td>
<td>Pi Kappa Alpha</td>
</tr>
<tr>
<td>Phi Mu</td>
<td>Sigma Chi</td>
</tr>
<tr>
<td>Zeta Phi Beta</td>
<td>Sigma Phi Epsilon</td>
</tr>
<tr>
<td>Sigma Gamma Rho</td>
<td>Sigma Pi</td>
</tr>
<tr>
<td>Phi Mu</td>
<td>Tau Kappa Epsilon</td>
</tr>
</tbody>
</table>

All of these social organizations encourage high scholarship, social training, and good citizenship.

ACADEMICALLY RELATED ORGANIZATIONS

The various major areas of the university sponsor activities and clubs which are open to persons who choose to major in the respective areas. The clubs provide opportunities for both academic and social interests of the members. They meet each month to study special current problems peculiar to their major interest and to promote fellowship, social activities, and understanding among the students of the different areas. These groups are listed under the name of the college with which they are affiliated.

College of Agriculture

- Agriculture Business Club
- ASU Rodeo Club
- Block and Bridle Club
- Plant Science Club
- Prevet Club
- Delta Tau Alpha
- Collegiate FFA
- Alpha Tau Alpha

College of Business

- Accounting Club
- Data Processing Management Association
- Association of Information Technology Professionals (AITP)
- Society for Human Resource Management (SHRM)
- The Educational Society for Resource Management (APICS)
College of Arts and Sciences
ASU Medical Arts Club
ASU Philosophy Club
ASU Social Work Club
Society of Physics Students
ASU Model UN
ASU Arab League
Pi Gamma Mu
Pi Sigma Alpha
Pi Alpha Alpha
The English Club

College of Engineering
American Society of Agricultural Engineers Student Chapter
ASU Student Chapter of The American Society of Civil Engineers
American Society of Mechanical Engineers
ASU Student Branch of The Institute of Electrical and Electronics Engineers
National Society of Black Engineers
Society of Manufacturing Engineers
The Alpha East Arkansas National Society of Professional Engineers

College of Fine Arts
American Society of Agricultural Engineers Student Chapter
ASU Student Chapter of The American Society of Civil Engineers
American Society of Mechanical Engineers
ASU Student Branch of The Institute of Electrical and Electronics Engineers
National Society of Black Engineers
Society of Manufacturing Engineers
The Alpha East Arkansas National Society of Professional Engineers

College of Nursing and Health Professions
ASU Student Nurses Association
Student Association of Clinical Laboratory Professionals
Physical Therapy Student Association
Student Radiologic Technologist Association

Department of Military Science
ROTC Ranger Challenge Platoon

SPECIAL INTEREST ACTIVITIES

All students enrolled at Arkansas State University are urged to take part in the numerous special interest activities:

Adult Student Union of ASU: To provide support for and offer programs geared to the particular needs of non-traditional students.

"A" Team: To perform drill and pom-pom activities at home football and basketball games.

ASU Art Students Union: To promote ASU through art activities region wide, to encourage individual growth among art students by providing professional experiences on and off campus, to increase campus awareness of the Fine Arts, and to culturally enrich ASU with art from its regional area.

ASU Botany Club: To promote interest in the botanical sciences/plant sciences.

ASU Chapter of the NAACP: To foster the improvement of the political, educational, social and economic status of minorities; encourage the elimination of racial prejudice; and stimulate an appreciation of minority contributions to society.

ASU Cheerleaders: To represent the student body at various athletic functions throughout the year.

ASU Diamonds: To serve as hostesses of the baseball team; perform duties of ushers, batgirls and media runners; decorates locker rooms and provides "goody" bags for the team.

ASU Drill Team: To perform drill and pom-pom activities at home football and basketball games.

ASU Gaming Society: To provide and organize role-playing games, collectible card games, and strategy board games for ASU students.

ASU Honors Association: To foster social contact, the exchange of ideas among honors students and faculty, and encourage intellectual freedom, achievement, and growth among its members.

ASU Indianaettes: To serve as an athletic hostess board with a concentration in football recruitment.

ASU Language Club: To promote the study and use of languages other than English through a variety of social and academic activities.

ASU Rugby Football Club: To offer any full time student or faculty member the opportunity to play and travel to other universities to play the sport of rugby.

ASU Wildlife Ecology Club: To promote and prepare students who have an interest in wildlife management.

Black Graduate Student Association: To promote interaction among black graduate students and improve relations with faculty and students.

Black Student Association: To develop university spirit among Black students, to promote high academic standards, to enhance social life, to promote racial harmony, and to serve as a medium between the Black student and administrative bodies.

Chinese Students Association: To promote cultural and social awareness of the Chinese culture.

Circle "K" International: To provide the opportunity for leadership development in service on the campus and in the community.

College Democrats: For those students interested in State and National Democratic Party activities.

College Republicans Club: For those students interested in State and National Republican Party activities.

Delta Hall Residence Hall: Governing body of Delta Hall.

Ducks Unlimited: This ASU chapter shall have as its primary purpose the generation of funds to be used by Ducks Unlimited, Inc., for developing, preserving, restoring and maintaining waterfowl habitat on the North American continent, and educating the general public concerning wetlands and waterfowl management. In so doing, this ASU Chapter shall strive to develop an interest in the objectives and goals of Ducks Unlimited, Inc., at the college level and provide a means for those interested for communication within the organization.

ECHO: To promote ecological awareness through education and participation in environmental concerns.

Forensics/Debate Squad: Students who meet general eligibility requirements may participate in intramural and intercollegiate debate, group discussion, extempore speaking, impromptu speaking, after-dinner speaking, oratory, radio speaking, prose and poetry reading, and similar events. Both contest and non-contest events are held on campus and at other colleges. The Pi Kappa Delta honorary fraternity is active in sponsoring campus-wide speech activities.

Graduate Student Advisory: To provide a forum for graduate students to express their concern for the welfare of the graduate students at the university.

Indian Village Association: To serve as the governing body of family housing and to provide a voice to the students residing in Indian Village.

Intercollegiate Athletics Program: Included in the intercollegiate athletics program are baseball, basketball, football, golf, ROTC Rifle Team, tennis, track, and volleyball.

International Reading Association: To involve students in literacy activities in the community.

International Students Association: To provide social and cultural activities that will promote cross-cultural awareness and understanding among all members of the university community. ISA is open to all ASU students, American as well as international.

Intramural Program: The Student Union Recreation Office sponsors an active intramural program. Anyone not participating in intercollegiate athletics is encouraged to seek recreation through this program.

Kays Hall Association: To administer and coordinate programs for the residents; to promote a spirit of unity; to encourage responsibility; to serve as a medium whereby the standards and ideals of ASU may be maintained.

See the ASU web page (www.astate.edu) for current bulletin information.
Malaysian Students Association: To provide common meetings for the promotion of cultural and social interests and to further understanding among all Malaysian students on campus.

Model United Nations Organization: Open to any student who wishes to learn more about international affairs by becoming part of a delegation to Model United Nations meetings.

Music: Choral groups, such as the ASU Concert Choir, the ASU Madrigal Singers, and the university bands offer every student an opportunity for musical participation.

Physical Therapy Student Association (PTSA): The PTSA is a campus wide organization of students united to support the community and offer leadership to interested students. We encourage future PT and PTA majors to participate in this organization which will cooperate with local departments of physical therapy by sharing knowledge of the field on a professional level.

Presidential Ambassadors: Serve as hosts to campus guest at university functions.

Residence Halls Association:

Rotaract Club of ASU: To provide an opportunity for young men and women to enhance the knowledge and skills that will assist them in personal development, to address the physical and social needs of their communities, and to provide better relations between all people worldwide through a framework of friendship and service (sponsored by the Jonesboro Rotary Club).

Spanish Club (Latertulia): To provide opportunities in a social environment to further knowledge of Hispanic culture and language.

Student Association of Clinical Laboratory Professionals (SACLP): To promote the awareness of the clinical laboratory sciences and advance the professional development of students in clinical laboratory education.

Student Association of Radiologic and Imaging Sciences (SARIS): To promote the science, design, development, construction, language, and applications of modern imaging and radiologic sciences.

Students of Alternative Lifestyles: To provide a friendly and supportive environment for straight, gay, lesbian and bisexual women and men of all description to meet.

Technology and Management Club: To provide both educational and social programs for the needs and interested students. In addition to regular business meetings, the T&M Club sponsors tours of local industry, meetings on special interests, and a variety of social functions.

Theatre: Students meeting eligibility requirements may also participate in plays presented by the Department of Speech Communication and Theatre Arts and the activities of Alpha Psi Omega. Students may participate in acting, stage makeup, costume, lighting, scenery design and construction, publicity, and other activities connected with play production. The program includes five major productions during the Winter Season, numerous theatre laboratory productions, and two Summer Season productions each year.

Tribal Leaders: To guide new students through orientation process.

Tri Epsilon: To promote an open exchange of ideas to further social interaction through regular readings, discussions and sharing events for members of the university community.

United Voices Gospel Choir: To serve as a medium for God through songs that provide uplifting spirits both on and off campus, to sing praises unto the Lord, and to help others find the way by being a friend to all.

University Hall Council: To serve as a governing body for University Hall.

RELIGIOUS ACTIVITIES

Arkansas State University is a state-supported institution and therefore non-denominational, but is distinctly interested in the religious life of its students and encourages them to attend regularly the churches of their choice. Active groups are Ambassadors, Baptist Student Fellowship, Muslim Student Association, Nazarene Campus Ministries, Newman Club, Standard Bearers of ASU, Student Association of Church of Jesus Christ of Latter-Day Saints, Wesley Foundation, and Fellowship of Christian Students.

Churches of all the leading denominations are located in Jonesboro. They are actively interested in the young people attending the university and welcome them to all their services.

HONORARY AND PROFESSIONAL ORGANIZATIONS

Arkansas State University recognizes a number of outstanding honorary and professional fraternities. These include:

AGRICULTURE BUSINESS—A professional organization for agriculture business students to promote academic and leadership qualities.

ALFRED R. SKOOG MEMORIAL CHAPTER OF THE AMERICAN CHORAL DIRECTORS ASSOCIATION—To further the knowledge and enjoyment of music in our schools and community.

THE ALPHA EAST ARKANSAS NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS—For students studying to become professional engineers.

ALPHA ETA SOCIETY—National honorary society for students in allied health.

ALPHA KAPPA DELTA—International honorary society for students in sociology.

ALPHA LAMBDA DELTA—National scholastic honorary society for freshmen.

ALPHA PSI OMEGA—An honorary fraternity which supports theatre activities.

ALPHA TAU ALPHA—National professional fraternity for students majoring in agriculture education.

AMERICAN CHEMICAL SOCIETY—National organization for students majoring in chemistry.

AMERICAN CRIMINAL JUSTICE ASSOCIATION (LAMDA ALPHA EPSILON OF ASU)—To foster professionalism between university students and faculty interested in criminal justice and law enforcement, and various law enforcement agencies associated with the community.

AMERICAN MARKETING ASSOCIATION—To foster scientific study and research in the field of marketing.

AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS STUDENT CHAPTER—To promote the interests of agricultural engineering students relative to their professional advancement and to the American Society of Agricultural Engineers.

ASSOCIATION FOR CHILDHOOD EDUCATION INTERNATIONAL—An international organization dedicated to the fulfillment of every child’s potential and to the professional development of educators.

ASSOCIATION OF COMPUTING MACHINERY—To promote an increased knowledge of the science, design, development, construction, language, and applications of modern computing machinery.

ASSOCIATION OF WOMEN IN COMMUNICATIONS—To promote the advancement of women in the field of communications, to work for the first amendment rights and responsibilities of communicators, to recognize distinguished professional achievements, and to promote high professional standards throughout the communications industry.

ASU AMERICAN ADVERTISING FEDERATION—To promote better understanding of advertising, professionalism, increased skills, and creativity.

ASU CHAPTER OF THE NATIONAL STUDENT NURSES ASSOCIATION (NSNA): NSNA is an organization for nursing majors and pre-nursing students. Members may participate in various programs and projects at local, state and national levels.

ASU NATIONAL REHABILITATION COUNSELOR ASSOCIATION (ASURCA)—To advance the role and functions of Rehabilitation Counseling in the rehabilitation process of all persons with disabilities through public awareness and professional development.

ASU SPEECH AND DEBATE TEAM—Intercollegiate debate and forensics competition.
ASU STUDENT BRANCH OF THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS—An organization to advance the professional development of students interested in electrical engineering as a profession.

ASU STUDENT CHAPTER OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS—To provide civil engineering students the opportunity to develop a professional consciousness and provide friendly contact with the engineering profession.

BETA BETA BETA—National recognition fraternity for outstanding students in biological sciences.

BETA GAMMA SIGMA—National scholastic honorary society for business and administration.

CHI SIGMA IOTA—Promotes scholarship, research, professionalism, and excellence in counseling.

COLLEGIATE FFA—For students majoring in Vocational Agriculture.

DELTA PI EPSILON—National honorary professional graduate fraternity in business education.

DELTA TAU ALPHA—National fraternity for outstanding students in agriculture.

THE EDUCATIONAL SOCIETY FOR RESOURCE MANAGEMENT (APICS)—To promote a professional attitude among student members toward an understanding and acceptance of the science of production and inventory control.

GAMMA BETA PHI—National honorary and service organization. Its primary purposes are to encourage scholastic effort and reward academic merit; to stand for and promote worthy character and high ideals; and to foster, disseminate, and improve education through appropriate service projects.

GAMMA IOTA SIGMA—Professional collegiate insurance fraternity.

GAMMA THETA UPSILON—International honor society for students in geography.

GAMMA SIGMA SIGMA—A national service sorority.

KAPPA DELTA PI—International honor society for outstanding students in education.

KAPPA KAPPA PSI—National recognition fraternity for outstanding students in band.

KAPPA MU EPSILON—National honorary fraternity for math majors.

KAPPA TAU ALPHA—To recognize and promote scholarship in the field of journalism.

LAMBDA ALPHA EPSILON—National honorary society for law enforcement.

LAMBDA IOTA TAU—International honorary fraternity for outstanding juniors and seniors majoring in literature.

LAMBDA NU—National Honor Society in Radiologic and Imaging Sciences.

LAMBDA PI ETA—National Communication Association for Speech Communications majors.

LAW SOCIETY OF ASU—To promote interest and knowledge in the law and/or the legal profession.

MUSIC EDUCATORS NATIONAL CONFERENCE—For students who are studying to become music teachers and desire to develop leadership in music education.

NATIONAL ART EDUCATION ASSOCIATION—For students who are studying to become art teachers.

NATIONAL ASSOCIATION OF JAZZ EDUCATORS—To bring together those students who are interested in jazz music and to provide opportunity for musical experiences.

NATIONAL BROADCASTING SOCIETY—National honor society for students in broadcasting.

NATIONAL PRESS PHOTOGRAPHERS ASSOCIATION—To provide professional experience in photojournalism.

NATIONAL SOCIETY OF BLACK ENGINEERS—To stimulate and develop student interest in engineering and applied sciences; to strive to increase the number of students studying engineering; and to work for advancement of the ethnic minority in professional industry.

NATIONAL STUDENT SPEECH, LANGUAGE AND HEARING ASSOCIATION—National organization for students in speech pathology and audiology.

OMICRON DELTA EPSILON—National honorary fraternity for students in economics.

PHI ALPHA THETA—National honorary fraternity for outstanding students in history.

PHI BETA LAMDA—National organization for students in business.

PHI DELTA KAPPA—National professional fraternity for graduate students and professionals in the field of education.

PHI EPSILON KAPPA—Professional education fraternity to foster scientific research in the fields of health, physical, recreation, and safety education.

PHI ETA SIGMA—National scholastic honorary fraternity for freshmen.

PHI KAPPA PHI—National scholastic honorary fraternity which recognizes outstanding scholarship.

PHI MU ALPHA—National professional music fraternity.

PHI SIGMA ALPHA—National honorary fraternity for outstanding students in political science.

PI GAMMA MU—International honorary fraternity for outstanding juniors, seniors, and graduate students in the social sciences.

PI KAPPA DELTA—National honorary debate and forensics fraternity.

PI OMEGA PI—National honorary fraternity for leading students in business education.

PI SIGMA ALPHA—National honor society for outstanding students in political science.

PSI CHI—To advance the science of psychology and to encourage, stimulate, and maintain scholarship of the individual members in all fields, and especially in psychology.

PUBLIC RELATIONS STUDENT SOCIETY OF AMERICA—National organization for students in public relations.

REHABILITATION COUNSELING ASSOCIATION—To advance the profession of Rehabilitation Counseling through the establishment of professional ethics, public understanding and supportive programs, which assist all persons with disabilities to become self-sufficient and contributing members of society.

RHO EPSILON—To promote real estate professionalism through education.

SIGMA ALPHA IOTA—National professional music fraternity.

SIGMA PI SIGMA—National physics honorary society for students engaged in physics and related activities.

SIGMA THETA TAU—National honor society of nursing that recognizes superior scholarship and leadership achievement of nursing students at the baccalaureate and graduate levels. Membership is by selection and petition.

SIGMA XI—National scientific honorary fraternity for faculty members engaged in research.

SOCIETY FOR HUMAN RESOURCE MANAGEMENT—For persons interested in personnel management or labor unions. It is affiliated with the national organization which has a membership of over thirty thousand, three hundred professional chapters and two hundred student chapters.

SOCIETY OF MANUFACTURING ENGINEERS—To guide future engineers and provide exposure to today's growing industry.

SOCIETY OF PROFESSIONAL JOURNALISTS—To promote, through service by students and professional journalists, the First Amendment and Freedom of Information, and to encourage more responsible media performance.

STUDENT ACTIVITIES BOARD—To provide diverse sources of entertainment and cultural activities for the student body as a whole.

STUDENT ARKANSAS EDUCATION ASSOCIATION—For all students who are planning to enter the teaching profession.

STUDENT ART EDUCATION ASSOCIATION—Local branch of Art Educators and the National Art Education Association.

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
Bachelor of Fine Arts (B.F.A.)

Art (emphasis in):
- Art Education
- Studio Art

Bachelor of General Studies (B.G.S.)

General Studies

Bachelor of Music (B.M.)

Music (emphasis on):
- Instrumental Performance
- Voice Performance

Bachelor of Music Education (B.M.E.)

Instrumental Music

French

Bachelor of Science in Agriculture (B.S.A.)

Agricultural Business (emphasis on):
- Agricultural Communications
- Agricultural Economics
- Agricultural Finance
- Farm Management
- Agricultural Marketing and Management

Agricultural Education (emphasis on):
- Agricultural Communication
- Agricultural Mechanics
- Teaching

Bachelor of Science in Nursing (B.S.N.)

Nursing

Bachelor of Science in Radiologic Sciences (B.S.R.S.)

- Imaging Specialist
- Diagnostic Medical Sonography
- Nuclear Medicine
- Radiation Therapy

Bachelor of Social Work (BSW)

- Social Work

**available only at designated off-campus sites

Minors Offered

Arkansas State University offers 45 minors with requirements varying from 15-24 semester hours. Specific requirements for each minor are stated in the respective college sections of this bulletin. The minors offered are listed below in alphabetical order with the appropriate page references.

- Accounting 21 hours p. 118
- African-American Studies 21 hours p. 258
- Agricultural Business 18 hours p. 101
Agricultural Mechanics 18 hours  p. 101
Agronomy 18 hours  p. 101
Animal Science 18 hours  p. 101
Art 21 hours  p. 224
Art History 18 hours  p. 225
Biology 21-22 hours  p. 336
Chemistry 20 hours  p. 343
Computer Science 18 hours  p. 345
Criminology 18 hours  p. 251
Economics 18 hours  p. 122
Electronic Commerce 18 hours  p. 116
English 18 hours  p. 255
Engineering 22-24 hours  p. 206
Folklore Studies 18 hours  p. 255
French 18 hours  p. 262
General Business 18 hours  p. 123
Geography 18 hours  p. 252
German 18 hours  p. 262
Graphic Design 21 hours  p. 225
History 18 hours  p. 258
Horticulture 18 hours  p. 101
Interdisciplinary Family Studies 24 hours  p. 165
Journalism 15 hours  p. 148
Leadership Studies 22 hours  p. 93
Management 18 hours  p. 127
Management Information Systems 18 hours  p. 124
Marketing 15 hours  p. 129
Mathematics 20 hours  p. 346
Medieval Studies 18 hours  p. 258
Military Science 20-21 hours  p. 370
Modern European Studies 18 hours  p. 259
Music 22-23 hours  p. 229
Philosophy 18 hours  p. 256
Physics 17 hours  p. 343
Political Science 18 hours  p. 263
Plant Science 18 hours  p. 101
Printing 18 hours  p. 148
Psychology 18 hours  p. 163
Radio-Television 18 hours  p. 149
Real Estate and Insurance 21 hours  p. 120
Sociology 18 hours  p. 252
Spanish 18 hours  p. 262
Speech Communication 21 hours  p. 151
Theatre 21 hours  p. 231
Women and Gender 18 hours  p. 256

ARMS ROTC PROGRAM
Since 1936 the Department of the Army, in cooperation with the officials of Arkansas State University, has provided a military training program through the Army Reserve Officers Training Corps (ROTC). Completion of either the two-year or the four-year ROTC program leads to a commission as an officer in the United States Army, Army Reserve, or National Guard.

The basic course of military science (freshman and sophomore years) is offered to male and female students who are U.S. citizens.

The advanced course (junior and senior years) is offered to students who meet specific requirements. For further information concerning qualifications for the advanced course, see Department of Military Science on page 367.

See the ASU web page (www.astate.edu) for current bulletin information.

COMBINED-DEGREE PROGRAMS
ASU students who enroll in approved dental, medical, pharmacy, or law schools before receiving degrees at Arkansas State University may be eligible to transfer up to 30 credit hours from the professional school to apply toward completion of their baccalaureate degree at ASU. To qualify for a combined degree, students must meet the following requirements.

1. The last 30 credit hours immediately prior to entrance into the professional school must be completed in residence at Arkansas State University.
2. All requirements for the degree except no more than 30 transferable credit hours must be completed. The 30 transfer hours must have prior approval of the department chair.
3. A written statement of eligibility for the degree must be obtained from the registrar.

A student making application for this baccalaureate degree must submit a transcript showing successful completion of the professional degree, file an "Intent to Graduate" form, and pay the graduation fee.

PRE-PROFESSIONAL PROGRAMS
There is no specific degree awarded in the pre-professional programs. It is common practice in the pre-dental, pre-medical, pre-optometry, pre-veterinary and similar programs to work toward one of the bachelors degrees offered by the university. There is no one degree specified by medical or dental schools, but most students in these pre-professional programs major in chemistry, physics or biological sciences.

Pre-Law Program
Prospective pre-law students should give careful consideration to the formulation of a definite plan for pre-law study. This should be based on the student's strengths and weaknesses, interests, and personal objectives in studying law. In general, the pre-law students should place primary emphasis on the acquisition of excellent methods of study, thought, and communication rather than on a specific body of factual knowledge. These skills can be acquired in a number of different areas, and successful law students and lawyers have college majors in almost every conceivable field.

A prospective student interested in pre-law should select a department in which to major. That department will have a pre-law adviser who will be as concerned with the breadth of the student's education as with the major. One or two minors in non-related areas are also recommended.

For information about general academic concerns, about the Law School Aptitude Test, and about law school entrance requirements, students may consult with pre-law advisers in the College of Business or the College of Arts and Sciences.

Pre-Professional Advising Within Specific Colleges
College of Agriculture
pre-forestry
pre-veterinary medicine

College of Sciences and Mathematics
pre-medical (see pages 126-127, 334-335; 338-339)
pre-dental (see pages 126, 127, 334-335; 338-339)
pre-optometry (see pages 334-335)
pre-pharmacy (see pages 339-340)
pre-chiropractic (see pages 334-335; 337)
pre-dental hygiene (see pages 334-335; 337)

College of Business
pre-law

College of Nursing and Health Professions
pre-dental hygiene

See the ASU web page (www.astate.edu) for current bulletin information.
Students interested in obtaining further information concerning any of these programs should contact the dean of the college in which the particular program is offered.

**TECHNICAL CERTIFICATE PROGRAMS**

Arkansas State University offers technical programs in which certificates of proficiency are awarded. These programs are offered for students who wish to prepare for employment in a minimum of one or two years and do not wish to pursue formal programs leading to an associate or a baccalaureate degree in the areas.

A Certificate of Proficiency in business information systems training is awarded upon completion of 30 semester hours of specified courses. The courses presented for this certificate must include ENG 1003, ENG 1013, and a minimum of 12 semester hours of management information systems courses.

For further information on these technical certificate programs, see the College of Business section of this catalogue.

**SPECIAL PROGRAMS**

Arkansas State University offers special service programs for in-service teachers and for others interested in college credit in addition to that which may be earned during the regular semesters.

**Summer Sessions**

Two five-week and one ten-week summer sessions are scheduled each summer with classes meeting four or five days per week. Students may earn up to a total of 14 hours of credit for the entire summer. Courses are offered in all colleges and departments during these sessions, with special attention given to the needs of in-service teachers.

**Special Studies Courses**

Special courses of study may, upon request, be organized in any college or independent department at any level of study to meet the needs of interested groups. The middle two digits of the course numbers for such programs, which must be approved through normal university curriculum channels, will always be in the 90 series. The letter prefix will show the department offering the course, the first digit will indicate the level of study, and the last digit will show the hours of credit. Credit earned in some special studies courses may not be applicable toward a degree. A zero as the first digit in the course number will designate such nondegree-credit courses.

**COMPRESSED VIDEO NETWORK PROGRAMS**

Arkansas State University operates the Compressed Video Network system to deliver courses to off-campus locations. This system links instructors and students on campus with students in several locations throughout Arkansas.

Weather conditions or academic schedules at the various locations will on occasion require the videotaping of the courses delivered via the Compressed Video Network. Enrollment in these courses constitutes permission for the classes and the students in them to be videotaped. Students who are unable to attend the classes when they are originally conducted will view the tapes in lieu of attending the scheduled class sessions. CVN sites are located at ASU-Jonesboro, ASU-Beebe, ASU-Heber Springs, ASU-Mt. Home, Paragould, ASU-Newport, Black River Technical College, East Arkansas Community College, Mid-South Community College, Mississippi County Community College, Ozarka Technical College, and Westark Community College.

Admission standards and registration procedures for these courses will be the same as for on-campus courses.

---

**OFF-CAMPUS AND INDEPENDENT-STUDY-BY-MAIL COURSES**

Arkansas State University operates a program in continuing education in an effort to provide higher education study opportunities for those who wish to pursue such study but may be unable to come to the ASU campus to attend classes. This service is rendered through independent study-by-mail courses and off-campus classes in the area which the university serves. Many of the courses listed in the university catalogues are available through this program.

A maximum of 31 semester hours of independent-study-by-mail credit may be counted toward a degree.

Students who complete at least 32 semester hours of residence credit on the Jonesboro campus may apply any number of ASU off-campus credits toward the baccalaureate degree.

Students may not enroll for study-by-mail or off-campus classes if the credit will create an overload situation for the semester or summer term (see Student Academic Load, page 37-38). Detailed information and bullets may be obtained by writing to Regional Programs Office, Arkansas State University, P.O. Box 2260, State University, AR 72467.

**INTERIM, SHORT, AND EXTENDED-TERM CREDIT OFFERINGS**

All on-campus credit offerings scheduled for periods other than the regular semesters or summer sessions must be approved by the department chair, the appropriate college dean, and the vice president for academic affairs.

Interim (offered between semesters/terms), short (less than a semester/term), and extended (more than a semester/term) credit offerings are expected to meet the same criteria of quality instruction, qualified instructor, and number of contact hours as required for regular on-campus credit offerings.

**GRADUATE SCHOOL**

Graduate study requires firm commitment to inquiry and learning and should be contemplated only by students who have demonstrated the power of independent thought and investigation. For this reason the Graduate School requires students to meet high standards and reserves the right to deny admission to those who do not meet these high standards. Regulations governing the Graduate School are designed to equal or exceed the minimum standards recommended by the Council of Graduate Schools in the United States and the Conference of Southern Graduate Schools.

Details of admission requirements, course descriptions, and degree programs are published in the Graduate Bulletin, which may be obtained from the Graduate School Office, Dean B. Ellis Library Building, room 143, or from the following address:

Graduate School
P.O. Box 60
State University, AR 72467

**Graduate School Computation of Grades for Admission Purposes**

Graduating seniors who are planning to apply for admission to graduate school should take note that most graduate schools recalculate GPAs based upon all courses that students have attempted during their college career. Thus, any repeated courses will have both grades counted in consideration for graduate school admission.

**Seniors Taking Graduate Courses:**

In exceptional cases, undergraduate students may enroll in graduate-level coursework for undergraduate or for graduate credit.

For undergraduate credit:

An undergraduate student who wishes to take a graduate course for undergraduate credit must 1) have a 3.25 undergraduate grade point average, 2) have senior standing, 3) have...
written consent from their adviser, the course professor, and the Graduate Dean (forms available in the Graduate Office), 4) enroll in no more than nine hours of graduate coursework for undergraduate credit.

For graduate credit:
An undergraduate student who wishes to take a graduate course for graduate credit must 1) meet the GPA requirements for admission to the Graduate School, 2) have no more than 12 hours of undergraduate work remaining to complete the bachelor's degree, 3) enroll in no more than 12 hours of graduate coursework for graduate credit and in no more than a total of 15 undergraduate and graduate hours.

Enrollment under this condition is limited to one term. Students will receive graduate credit only if a grade of "B" or higher is achieved in all graduate work and only after the requirements for the bachelor's degree have been met and all requirements for admission to the Graduate School have been met.

An exception is made for senior nursing students. See details in the College of Nursing and Health Professions section in the Graduate Bulletin.

Graduate Degrees Offered
Arkansas State University offers work leading to the following graduate degrees with major fields of emphasis as indicated:

Doctor of Philosophy
Environmental Sciences
Heritage Studies

Doctor of Education
Educational Leadership

Specialist in Community College Teaching
Emphasis Areas:
Agricultural Education
Biology
Business Administration
Business Education
Chemistry
Community College Administration
English
History
Music Education
Physical Education
Reading
Sociology
Speech Communication and Theatre Arts
Vocational-Technical Administration

Specialist in Education
Educational Administration
Psychology and Counseling

Master of Accountancy

Master of Arts
Art
Biology

English
History
Heritage Studies
Political Science
Sociology
Speech Communication and Theatre Arts
Emphasis in Speech Communication and Theatre Arts

Master of Business Administration

Master of College Student Personnel Services

Master of Communication Disorders

Master of Music

Master of Music Education

Master of Physical Therapy

Master of Public Administration

Master of Rehabilitation Counseling

Master of Science
Biology
Chemistry
Computer Science
Early Childhood Services
Exercise Science
Information Systems and eCommerce
Mathematics
Vocational-Technical Administration

Master of Science in Agriculture
Agricultural Education
Agriculture

Master of Science in Education
Early Childhood Education
Educational Leadership
Curriculum and Instruction
Educational Theory and Practice
Elementary Education
Reading
Secondary Education Teaching Fields
Biology
Business Education
Chemistry
English
Mathematics
Physical Education
Social Science
School Counseling
Special Education
Emotionally Disturbed

See the ASU web page (www.astate.edu) for current bulletin information.
The General Education Program

Statement of Mission for the General Education Program of Arkansas State University

The general education program develops a foundation and motivation for the lifelong pursuit of learning in undergraduate students at Arkansas State University by introducing them to a broad range of essential areas of knowledge that will enable them to participate in our democratic nation and in a global society.

General Education Goals for Students

1. Communicating effectively. Students should be able to communicate effectively and correctly, in writing and in speech, for a variety of purposes, using appropriate forms of discourse, organizational strategies, and vocabulary.
2. Thinking critically. Students should develop the skills necessary to digest, assimilate, and evaluate critically what they read, see and hear. They should employ rational argument and deduction routinely in their own work.
3. Using mathematics. Students should be able to use, understand and apply basic mathematical skills in practical applications.
4. Using technology. Students should be able to use appropriate technologies to locate, process and evaluate information in an effective and ethical manner.
5. Understanding global issues. Students should be aware of the social, political, economic and cultural dimensions of a diverse national and world community. They should have the intellectual and interpersonal skills needed to participate and succeed in a dynamic global society.
6. Developing a life-long appreciation of the arts and humanities. Students should develop an appreciation for the arts and humanities. They should be aware of the role of art and literature in human civilization and contemporary culture.
7. Developing a strong foundation in the social sciences. Students should be aware of the diverse systems developed by humans to manage and structure our relationships with one another. Students should prepare for the full range of public and private roles they are expected to fulfill as citizens, decision-makers and human beings in a democratic America and in a global society.
8. Using science to accomplish common goals. Students should understand how science is conducted and the criteria for scientific evidence so that they will be able to make informed decisions about the health and well-being of their communities and the natural environment. They should be aware of the ethical and political issues raised by science.
9. Providing foundations necessary to achieve health and wellness. Students should have a knowledge and appreciation of the scientific bases of physical and mental health and their contribution to overall wellness.
10. Understanding interdependence. Students should grasp how the many spheres of human knowledge are interrelated as they address problems and issues in their professional, civil, and personal lives. They should acknowledge the responsibilities of informed citizenship and the impact of their decisions and actions on others.

Assessment and Enhancements

University students have earned the freedom to make decisions about their education as well as share the responsibility for those decisions. The three-hour General Education Enhancements requirement offers students a chance to exercise this freedom and to experience this responsibility.

Because of the fundamental nature of communication and mathematics, all students will be required to undergo assessment upon completion of required courses in these areas. Students who receive satisfactory scores on both assessments will be free to choose any additional course from among those listed as enhancement courses. (See below). A student who does not receive a satisfactory score on a general education assessment of communication will be required to choose from among those courses specially designated as Communication Enhancements. Likewise, a student who does not receive a satisfactory score
on a general education assessment of mathematics will be required to choose from among those courses specially designated as Mathematics Enhancements. NOTE: Students receiving unsatisfactory scores in both areas will be required to complete a total of six hours of enhancements, rather than the standard three hours. The intent of this policy is to provide opportunities for additional development in these fundamental areas if a student's scores indicate that he or she has not yet mastered them.

### Sequence of Courses

The General Education Program is designed to be completed in the first and second years, though this will not be possible for every student. However, the Communication, Mathematics, and Critical Thinking requirements must be completed within the first 45 hours earned toward a degree. The requirements in Science are to be completed before 60 degree hours are completed, if a course listed in the category is a prerequisite for a course listed under requirements of the major. Students and advisers should check the general education requirements specified by each college for its various majors. Except where modifications are noted for specific degree programs, all baccalaureate degree candidates are required to complete the following general education curriculum.

#### General Education Curriculum for Baccalaureate Degrees

<table>
<thead>
<tr>
<th>Category</th>
<th>Courses</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>ENG 1003, Freshman English I</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MATH 1023, College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>One of the following courses:</td>
<td>3</td>
</tr>
<tr>
<td>Understanding Global Issues</td>
<td>One of the following courses:</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>Students must complete three courses from this section. At least one must be a fine arts course. At least one must be a humanities course.</td>
<td>9</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>MUS 2503, Fine Arts—Musical</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>MUS 2503, Fine Arts—Musical</td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Three of the following courses. At least one course must be selected from HIST 2763, HIST 2773, or PSOC 2103.</td>
<td>9</td>
</tr>
</tbody>
</table>

Transfer students are expected to complete the general education requirements; however, courses completed before transfer may be used to satisfy these requirements when so determined by the registrar.

#### General Education Curriculum for Associate in Applied Science Degrees

<table>
<thead>
<tr>
<th>Category</th>
<th>Courses</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>ENG 1003, Freshman English I</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MATH 1023, College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Natural Sciences and Mathematics</td>
<td>BIOL 1003, Biological Science and BIOL 1001, Laboratory for Biological Science</td>
<td>7</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
### General Education Curriculum for Associate in General Studies Degrees

<table>
<thead>
<tr>
<th>Component</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composition</strong></td>
<td>6</td>
</tr>
<tr>
<td>ENG 1003, Freshman English I</td>
<td></td>
</tr>
<tr>
<td>ENG 1013, Freshman English II</td>
<td></td>
</tr>
<tr>
<td><strong>Natural Sciences and Mathematics</strong></td>
<td>7</td>
</tr>
<tr>
<td>MATH 1023, College Algebra or MATH 1013, College Mathematics and one of the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 1001, Laboratory for Biological Science and BIOL 1003, Biological Science</td>
<td></td>
</tr>
<tr>
<td>(Students may substitute a higher level biology course and its laboratory for which BIOL 1001 and BIOL 1003 are prerequisites, or may substitute BIOL 1013 and BIOL 1021.)</td>
<td></td>
</tr>
<tr>
<td>GEOL 1003, Environmental Geology and GEOL 1001, Laboratory for Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>PHYS 1203, Physical Science and PHYS 1201, Laboratory for Physical Science</td>
<td></td>
</tr>
<tr>
<td>CHEM 1013, General Chemistry I and CHEM 1011, Laboratory for General Chemistry</td>
<td></td>
</tr>
<tr>
<td>PHYS 1103, Introduction to Space Science and PHYS 1101, Laboratory for Introduction to Space Science</td>
<td></td>
</tr>
<tr>
<td>PHYS 2034, University Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2054, General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2073, Fundamental Physics and PHYS 2071, Laboratory for Fundamental Physics</td>
<td></td>
</tr>
<tr>
<td><strong>Arts and Humanities</strong></td>
<td>3</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>MUS 2503, Fine Arts-Musical</td>
<td></td>
</tr>
<tr>
<td>ART 2503, Fine Arts-Visual</td>
<td></td>
</tr>
<tr>
<td>THEA 2503, Fine Arts-Theatre</td>
<td></td>
</tr>
<tr>
<td>ENG 2003, Introduction to the Western World I</td>
<td></td>
</tr>
<tr>
<td>ENG 2013, Introduction to the Western World II</td>
<td></td>
</tr>
<tr>
<td>PHIL 1103, Introduction to Philosophy</td>
<td></td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td>6</td>
</tr>
<tr>
<td>Two of the following:</td>
<td></td>
</tr>
<tr>
<td>HIST 1013, World Civilization To 1660</td>
<td></td>
</tr>
<tr>
<td>HIST 1023, World Civilization Since 1660</td>
<td></td>
</tr>
<tr>
<td>HIST 2763, The United States To 1876</td>
<td></td>
</tr>
<tr>
<td>HIST 2773, The United States Since 1876</td>
<td></td>
</tr>
<tr>
<td>PSYC 2013, Introduction to Psychology</td>
<td></td>
</tr>
<tr>
<td>SOC 2213, Principles of Sociology</td>
<td></td>
</tr>
<tr>
<td>ANTH 2233, Introduction to Cultural Anthropology</td>
<td></td>
</tr>
<tr>
<td>GEOG 2613, Introduction to Geography</td>
<td></td>
</tr>
<tr>
<td>ECON 2333, Economic Issues and Concepts</td>
<td></td>
</tr>
<tr>
<td>ECON 2313, Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td><strong>Computer Applications/Fundamentals</strong></td>
<td>3</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>CS 1043, Introduction to Computers or MIS 1503, Microcomputer Applications</td>
<td></td>
</tr>
</tbody>
</table>

**Total Requirements** 35

---

### General Education Curriculum for Associate in Science Degrees

<table>
<thead>
<tr>
<th>Component</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composition</strong></td>
<td>6</td>
</tr>
<tr>
<td>ENG 1003, Freshman English I</td>
<td></td>
</tr>
<tr>
<td>ENG 1013, Freshman English II</td>
<td></td>
</tr>
<tr>
<td><strong>Natural Sciences and Mathematics</strong></td>
<td>11</td>
</tr>
<tr>
<td>Biological Sciences (one course and its laboratory):</td>
<td></td>
</tr>
<tr>
<td>BIOL 1001, Laboratory for Biological Science and BIOL 1003, Biological Science</td>
<td></td>
</tr>
<tr>
<td>(Students may substitute a higher level biology course and its laboratory for which BIOL 1001 and BIOL 1003 are prerequisites, or may substitute BIOL 1013 and BIOL 1021.)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1003, Environmental Geology and GEOL 1001, Laboratory for Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>PHYS 1203, Physical Science and PHYS 1201, Laboratory for Physical Science</td>
<td></td>
</tr>
<tr>
<td>CHEM 1013, General Chemistry I and CHEM 1011, Laboratory for General Chemistry</td>
<td></td>
</tr>
<tr>
<td>PHYS 1103, Introduction to Space Science and PHYS 1101, Laboratory for Introduction to Space Science</td>
<td></td>
</tr>
<tr>
<td>PHYS 2034, University Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2054, General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2073, Fundamental Physics and PHYS 2071, Laboratory for Fundamental Physics</td>
<td></td>
</tr>
<tr>
<td><strong>Arts and Humanities</strong></td>
<td>6</td>
</tr>
<tr>
<td>Two of the following:</td>
<td></td>
</tr>
<tr>
<td>ENG 2003, Introduction to Literature of the Western World I</td>
<td></td>
</tr>
<tr>
<td>ENG 2013, Introduction to Literature of the Western World II</td>
<td></td>
</tr>
<tr>
<td>PHIL 1103, Introduction to Philosophy</td>
<td></td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td>12</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>HIST 1013, World Civilization To 1660</td>
<td></td>
</tr>
<tr>
<td>HIST 1023, World Civilization Since 1660</td>
<td></td>
</tr>
<tr>
<td>HIST 2763, The United States To 1876</td>
<td></td>
</tr>
<tr>
<td>HIST 2773, The United States Since 1876</td>
<td></td>
</tr>
<tr>
<td>PSYC 2013, Introduction to Psychology</td>
<td></td>
</tr>
<tr>
<td>SOC 2213, Principles of Sociology</td>
<td></td>
</tr>
<tr>
<td>ANTH 2233, Introduction to Cultural Anthropology</td>
<td></td>
</tr>
<tr>
<td>GEOG 2613, Introduction to Geography</td>
<td></td>
</tr>
<tr>
<td>ECON 2333, Economic Issues and Concepts</td>
<td></td>
</tr>
<tr>
<td>ECON 2313, Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td><strong>Natural Sciences and Mathematics</strong></td>
<td>11</td>
</tr>
<tr>
<td>Biological Sciences (one course and its laboratory):</td>
<td></td>
</tr>
<tr>
<td>BIOL 1001, Laboratory for Biological Science and BIOL 1003, Biological Science</td>
<td></td>
</tr>
<tr>
<td>(Students may substitute a higher level biology course and its laboratory for which BIOL 1001 and BIOL 1003 are prerequisites, or may substitute BIOL 1013 and BIOL 1021.)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1003, Environmental Geology and GEOL 1001, Laboratory for Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>PHYS 1203, Physical Science and PHYS 1201, Laboratory for Physical Science</td>
<td></td>
</tr>
<tr>
<td>CHEM 1013, General Chemistry I and CHEM 1011, Laboratory for General Chemistry</td>
<td></td>
</tr>
<tr>
<td>PHYS 1103, Introduction to Space Science and PHYS 1101, Laboratory for Introduction to Space Science</td>
<td></td>
</tr>
<tr>
<td>PHYS 2034, University Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2054, General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2073, Fundamental Physics and PHYS 2071, Laboratory for Fundamental Physics</td>
<td></td>
</tr>
</tbody>
</table>

**Total Requirements** 35

---

See the ASU web page (www.astate.edu) for current bulletin information.
Honors College

Director: Professor Gilbert L. Fowler, Jr., Interim Dean

PURPOSE

Honors aims to create students who, over the course of their study of various disciplines, become active, creative scholars, fully prepared to contribute their knowledge and skills to the wider world. Honors offers special opportunities for qualified students to develop their abilities, enhance their analytical skills and intensity their knowledge and skills in their chosen fields. Honors also serves the general student body in many other ways, including sponsoring ASU's participation in the National Student Exchange, promoting undergraduate research, creative activity, helping them prepare for national competitions, and leadership activities.

The Honors College offers Honors sections of General Education courses, independent study opportunities, and Honors seminars, which are courses that focus on a specific area, have specialized content, or treat interdisciplinary topics.

ELIGIBILITY FOR HONORS COURSES

Entering freshmen with an ACT score of 24 or above or a high school GPA of 3.50 or better may enroll in lower division Honors courses. Freshmen who do not initially qualify may enroll in lower division courses if, after completing eighteen hours, they have earned a 3.25 GPA. Students transferring to Arkansas State University with fewer than eighteen hours of college work must meet the qualifications above. Students transferring to Arkansas State University with eighteen or more hours of work in which they have earned a 3.25 GPA may enroll in Honors courses. Transfer students who do not initially qualify may enroll in Honors work if, after completing eighteen hours of work, they have earned a 3.25 GPA.

All other undergraduates may take either lower or upper division Honors courses, provided they have a 3.25 GPA in their university work. Graduate students with a 3.5 GPA in their graduate work or, if first semester students, a 3.5 as undergraduates may enroll in upper division Honors courses. Transfer students who do not initially qualify may enroll in Honors courses if, after completing eighteen hours of work, they have earned a 3.25 GPA.

No student may carry more than ten hours of Honors courses in any one term.

GRADUATION IN HONORS

To graduate "in Honors," students must take at least eighteen hours of Honors course work. Nine or more hours must be upper division work. They must also have at least a 3.5 GPA. Transfer students may graduate in Honors by either meeting these requirements in full or, if entering with 36 or more hours completed, by taking fifteen hours of upper division Honors work. They must also have at least a 3.5 GPA. Diplomas of those fulfilling these requirements will bear the designation "Honors." All Honors courses are indicated as such on the student's transcript.

GRADUATION IN UNIVERSITY HONORS

The program in "University Honors" is designed for University Honors Scholars, as well as other participants in Honors who apply during their sophomore year and maintain at least a 3.5 GPA. Participants in the "University Honors" program are granted exceptional academic freedom and academic privileges, including (1) the right to substitute selected upper level courses for general education requirements, (2) the right to claim selected upper level courses outside the major as Honors-calibre credit, (3) the right to take graduate courses for undergraduate credit as juniors and seniors, and (4) term-loan library privileges (appropriate authorization forms must be completed in order to exercise each of these privileges). In return, University Honors students must maintain at least a 3.5 cumulative GPA and complete at least
two Honors-calibre courses during each academic year, totalling at least 24 credits in all (at least twelve of them at the upper division level) including an undergraduate thesis in their major or minor area. Diplomas of those fulfilling the requirements will bear the designation "University Honors."

THE HONORS CURRICULUM
Honors courses include Honors sections of general education courses, Honors options (in which an additional component is added to an upper division course in the major or minor), Honors seminars, Honors Independent Study, and Honors Senior Thesis. Students in University Honors have additional options for earning Honors-calibre credit; they may, with approval, substitute selected upper level courses for general education courses, claim selected upper level courses outside the major, and take graduate courses for undergraduate credit as juniors and seniors.

Lower Division Work
An Honors section of each of the following introductory courses will be offered:

Composition
EN-H 1003, Honors Freshman English I
EN-H 1013, Honors Freshman English II

Arts and Humanities
EN-H 2003, Honors Introduction to Literature of the Western World I
EN-H 2013, Honors Introduction to Literature of the Western World II
MU-H 2503, Honors Fine Arts-Musical
TH-H 2503, Honors Fine Arts-Theatre
AR-H 2503, Honors Fine Arts-Visual
PH-H 1103, Honors Introduction to Philosophy

Natural Sciences and Mathematics
BI-H 1001, Honors Laboratory for Biological Science
BI-H 1003, Honors Biological Science
BI-H 1013, Honors Biology of the Cell
BI-H 1021, Honors Laboratory for Biology of the Cell
CH-H 1013, Honors General Chemistry I
MA-H 2204, Honors Calculus I

Social Science
AN-H 2233, Honors Introduction to Cultural Anthropology
EC-H 2313, Honors Principles of Macroeconomics
HI-H 1013, Honors World Civilization to 1660
HI-H 1023, Honors World Civilization since 1660
HI-H 2753, Honors The United States to 1876
HI-H 2773, Honors The United States since 1876
PO-H 2103, Honors Introduction to American Government
PS-H 2113, Honors Introduction to Psychology
SO-H 2213, Honors Principles of Sociology

Other lower level courses
QM-H 2113, Honors Statistics for Decision Making
SP-H 1023, Honors Elementary Spanish I
SP-H 2013, Honors Intermediate Spanish I

Upper Division Work
Special upper division honors seminars will be offered each semester, and other regular courses may, by arrangement, be taken for Honors credit. Students should consult the Honors office for further information.

HONORS COURSE DESCRIPTIONS
HNRS 4003-6. Honors Independent Study* A course of study initiated by the student and carried out under the supervision of a member of the faculty with appropriate expertise. Planning for Honors Independent Study should begin no later than eight weeks prior to the beginning of the semester in which the study will begin.

HNRS 4893-6. Honors Senior Thesis* A research or creative project in the major or minor undertaken by advanced students, working under the supervision of a member of the faculty with appropriate expertise, as the capstone to the college career; concludes with an oral defense. Planning for an Honors Senior Thesis should begin no later than eight weeks prior to the beginning of the semester in which the study will begin. Requires senior Honors standing. A maximum of six hours of Honors Senior Thesis credit may be applied toward a degree.

*Requires Honors standing and approvals by the supervising faculty member, the major adviser, the Honors adviser in the major, the department chair, the College Honors Advisory Committee chair, and the Dean of the Honors College.
Colleges and Departments

The faculty and curricula of Arkansas State University are organized into eleven colleges, the graduate school, and two independent departments. All undergraduate programs are included by college, department, and major in this bulletin. Graduate School programs are described in the Graduate Bulletin.

HONORS COLLEGE

UNIVERSITY COLLEGE

COLLEGE OF AGRICULTURE

COLLEGE OF BUSINESS
  Department of Accounting and Law
  Department of Computer and Information Technology
  Department of Economics and Finance
  Department of Management and Marketing

COLLEGE OF COMMUNICATIONS
  Department of Journalism and Printing
  Department of Radio-Television
  Department of Speech Communication

COLLEGE OF EDUCATION
  ASU Childhood Services
  Center for Excellence in Education
  Department of Psychology and Counseling
  Department of Educational Leadership, Curriculum, and Special Education
  Department of Teacher Education
  Department of Health, Physical Education, and Sport Sciences
  Professional Education Programs

COLLEGE OF ENGINEERING
  Engineering
  Technology

COLLEGE OF FINE ARTS
  Department of Art
  Department of Music
  Department of Theatre

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
  Department of Criminology, Sociology, Social Work, and Geography
  Department of English and Philosophy
  Department of History
  Department of Languages
  Department of Political Science

COLLEGE OF NURSING AND HEALTH PROFESSIONS
  Department of Health Professions
  Department of Nursing
  Department of Social Work
University College

Associate Professor Herman W. Strickland, Dean

University College is dedicated to the idea that all university students should pursue a program containing the elements of a liberal education, that they should encounter and become familiar with the major fields of human endeavor and achievement, that they should be aware of values and value judgements in those areas, and that they should be knowledgeable of contemporary trends and issues in our civilization.

The college emphasizes teaching excellence, the evaluative processes as both teaching and measuring devices, and student-teacher rapport. Faculty advisers are encouraged to view students as human beings rather than budding, emerging specialists. Since many students change the educational objective indicated when they first enroll, they will not be forced to designate a major, but may be encouraged to explore a variety of academic areas. Students desiring to do so will be permitted to designate, or change, a major at any time.

Students whose entrance test scores indicate that developmental work would be helpful in preparing them for successful educational careers at Arkansas State University may be required to complete appropriate courses as prerequisites for enrolling in the general education courses of the university. University credit is not awarded for the successful completion of developmental courses, and the total hours required for graduation are not reduced for participation in these courses.

University College offers the Associate in General Studies degree and the Bachelor of Science in Interdisciplinary Studies degree, the Bachelor of Science in Digital Media and Design degree and a Minor in Leadership Studies.

FIRST YEAR STUDIES

Director: Paula Bradberry; Instructors: Gloria Bridges, Barbara Doyle, Lisa Ferrell, Polly Green, Barbara Knuckles, Margaret McClain

Right Start is a component of First Year Programs that serves first-year students whose ACT composite score is 18 or below and who have need for developmental course work based on their subject area ACT scores. This comprehensive program is designed to provide those students with the needed language, reading and study skills necessary for college level work. Students enrolled in Right Start are required to take all appropriate developmental courses in English, math and reading as mandated by the Arkansas legislature during their first periods of enrollment. Right Start students must also enroll in Strategies for College Success, a course with content similar to FYE Seminars (below), but with a much stronger focus on effective study skills. Intrusive advising services are an essential part of the program and are provided by the Right Start faculty.

Courses in reading, language and study skills offered through First Year Programs are available to any ASU student who has need of such courses, although enrollment in Strategies for College Success is restricted to Right Start students only during the fall semester.

FYE SEMINARS - MAKING CONNECTIONS

FYE Seminars are an integral part of the university’s first-year experience program and are strongly recommended for all first-year students that are not required to take Strategies for College Success. These classes are designed to assist students to make a smooth transition into the university experience and to help them improve their preparation for a full-life at the university. Several different sections are offered including those that are discipline or topic-specific. Although seminars may vary in content, they all have a common core curriculum that includes the following: academic performance skills, time and other self management skills, problem solving and understanding university policies and expectations.
certain types of courses, i.e., physical education activity, music ensembles, etc., will be limited.

Students seeking entrance into the Associate in General Studies program must satisfy university admission standards identical to those required of applicants for four-year university programs. Students may transfer from the Associate in General Studies program to other degree programs, and may well do so if they change career objectives and/or goals.

An Associate in General Studies degree may be conferred upon students who satisfactorily complete the appropriate curriculum and meet the specific requirements for the degree. Students pursuing the Associate in General Studies degree are responsible for complying with the general academic regulations of the university as well as all other university policies and requirements.

A 2.0 cumulative grade point average is required on all course work. A student must earn at least twelve semester hours of credit after enrolling in the Associate in General Studies degree program in order to be qualified and eligible to receive the degree.

ASSOCIATE IN GENERAL STUDIES DEGREE PROGRAM

Arkansas State University offers the Associate in General Studies degree program through University College. The program is designed to permit that segment of the student population for which the traditional degree tracks in higher education hold little or no attraction to utilize existing resources of the university in developing a personalized program of study. Through curriculum flexibility, the program attempts to provide the most challenging education possible, both to the academically gifted and to the creative student.

The Bachelor of Science in Interdisciplinary Studies degree program at Arkansas State University offers the Bachelor of Interdisciplinary Studies degree through University College. The program is designed to prepare students who want to change their major or wish to withdraw from ASU. The Advising Center provides services for students placed on academic probation or suspension or with any academic concern. Any student regardless of major may contact this office with general advising questions or concerns at 972-2031.

GENERAL EDUCATION REQUIREMENTS:

Students pursuing the Associate in General Studies degree are responsible for complying with the general academic regulations of the university as well as all other university policies and requirements.

Bachelor of Science in Interdisciplinary Studies Degree Program

Arkansas State University offers the Bachelor of Interdisciplinary Studies degree program through University College. The program is designed to permit that segment of the student population for which the traditional degree tracks in higher education hold little or no attraction to utilize existing resources of the university in developing a personalized program of study. Through curriculum flexibility, the program attempts to provide the most challenging education possible, both to the academically gifted and to the creative student.

The Bachelor of Science in Interdisciplinary Studies (BSIS) program is an acknowledgment of the existing degree programs, as varied as they are, at Arkansas State University, cannot satisfy the educational needs of all students. The Interdisciplinary Studies program provides opportunity through which students may, with the aid of the Dean of University College, determine the composition of their own degree programs. The program provides curricular opportunities, which cut across traditional subject matter (department and/or college) areas to meet the particular needs of more mature students desiring formal programs of study for professional development of a nontraditional nature. The program does not duplicate the offerings of the other colleges of the university, but may include curriculum offerings of any college. Course work must be distributed among a minimum of three areas of study approved by the Dean of University College.

Admission standards for students seeking to enroll in the Bachelor of Science in Interdisciplinary Studies are dependent upon the curriculum option selected, but are similar to those required of applicants who seek to enroll in other four-year programs of this university.

Students pursuing this degree are responsible for having on record a complete, planned program approved by the Dean of University College. Students are also responsible for complying with the general academic regulations of the university as well as all other university policies and requirements. BSIS majors must complete ENG 1003 with a grade of "C" or better before enrolling in ENG 1013 and complete ENG 1013 with a grade of "C" or better. A 2.0 cumulative grade point average will be required on all junior-senior level courses and a 2.20 average on all course work for graduation. The number of semester credit hours earned in certain types of courses, i.e., physical education activity, music ensembles, etc., will be limited.
to the number of credits that the area offering the course will accept toward a bachelor's degree.

The number of semester hours earned in the College of Business is limited to thirty (30) or fewer. At least twenty-four (24) semester hours of credit must be earned after a student has enrolled in the Bachelor of Science in Interdisciplinary Studies program in order for the student to be qualified and eligible to receive the degree.

Bachelor of Science in Interdisciplinary Studies

General Education Requirements:
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 ........................................ 46-49

Major Courses:

Three Academic Areas .................................................................................................................. 54-63

Electives:

Electives ........................................................................................................................................ 24-12

Total 124

BACHELOR OF SCIENCE IN DIGITAL MEDIA AND DESIGN

The Bachelor of Science in Digital Media and Design is a multi-disciplinary degree featuring courses in the College of Communications and the College of Fine Arts. The program provides an opportunity for students to gain a combination of knowledge and skills in content, design and production that will allow them to compete regionally and globally.

The degree will require 124 hours for graduation, including a core of 18 hours plus 24 additional hours in other designated major courses. Students are required to take courses in Communications and in Fine Arts while having the opportunity to select elective courses reflecting their special interests.

Students interested in the program should contact either the Department of Art or the Department of Radio-Television for additional information.

Major in Digital Media and Design

Bachelor of Science

General Education Requirements:
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 ........................................ 46-49

Major Requirements:

ART 2453, Visual Thinking ........................................................................................................... 3
ART 2443, Introduction to Digital Design .................................................................................... 3
ART/RTV 3673, Seminar in Digital Media and Design ................................................................. 3
RTV 4881-2-3, Special Projects in Electronic Media .................................................................... 3
RTV 4363, Multimedia Production .............................................................................................. 3
RTV/JOUR 4373, Internet Communications ............................................................................. 3
Additional hours in three areas: design, communications, critical thinking (at least one course in each area) ................................................................. 24-30

Design: ART 1013, ART 2413, ART 2423, ART 3443, ART 4363, ART 4403, ART 4413, ART 4463 ................................................................. 3

Critical Thinking: ART 3333, JOUR 4233, PHIL 3723, RTV/JOUR 3363, RTV 4313, RTV 4423, RTV/JOUR 4373 ................................................................. 3

Communications: JOUR 3043, JOUR 3073, JOUR 3673, PRIN 1813, PRIN 4613, RTV/JOUR 1003, RTV 2023, RTV 3013, RTV 3023, RTV 3033, RTV 3323, RTV 4353, RTV 4443, CJS 1043 ................................................................. 3

Electives: ........................................................................................................................................ 32-38

Total 124

Leadership Studies Minor

The Minor in Leadership Studies is designed for students of all majors of the University. This minor is intended to supplement the major with studies and practice in leadership development. The goal is to prepare students for leadership roles and responsibilities on-campus and to extend those roles to careers, community and family endeavors. The curriculum focuses on expanding students’ knowledge, skills and understanding of specific leadership theories, concepts, models and current leadership issues in applied settings. Students are given opportunities to develop their own philosophies and leadership styles through various media both in-and out-side the classroom. Emphasis is placed on effective communication skills and practical leadership applications through internships.

Requirements:

UC 1002 Introduction to Leadership Development ................................................................. 2
UC 3012 Seminar in Leadership Development ...................................................................... 2
MISM 3153 Organizational Behavior ...................................................................................... 3
MISM 3613 Leadership ........................................................................................................... 3
SCOM 3303 Business and Professional Speech Communication ........................................... 3
UC 4833 Special Problems in Leadership Development ...................................................... 3

Electives: (Choose 2 of the following) ....................................................................................... 2

PSY 3303 Motivation .................................................................................................................. 3
PSY 4743 Organizational Psychology ......................................................................................... 3
SCOM 2423 Principles of Argumentation ............................................................................... 3
SCOM 2423 Principles of Persuasion ......................................................................................... 3
SCOM 4203 Small Group Communication ............................................................................ 3
SCOM 4223 Informational Communication ............................................................................. 3
SCOM 4223 Interpersonal Communication ............................................................................. 3
SCOM 4233 Nonverbal Communication .................................................................................. 3

TOTAL 22

NOTE: Any student who completes the necessary courses may declare this minor and have it appear on the transcript. Each Department which offers a course included in the minor will be determined for its own majors whether courses taken for their minor can also count toward their major.

UNIVERSITY COLLEGE COURSE DESCRIPTIONS

University College (UC)

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

0003. (1 000 3x) Language Development Designed to prepare the student for ENG 1003. Also appropriate for nontraditional students who feel a need to review basic language skills. Emphasis will be placed upon basic grammar, sentence structure, paragraphs, and short essays. (F, S, SU)

0023. (2 001 3x) Developmental Reading Designed to enhance reading ability through emphasis on vocabulary development, comprehension improvement, inferential and critical reading skills. The course includes instruction in structural analysis, contextual analysis, denotation and connotation, main idea, supporting details, organizational patterns, making inferences, and recognizing bias. The use of textbook excerpts provides a basis for transferring and applying learned reading skills to other college courses. (F, S, SU)

0053. Critical Thinking and Learning Designed to improve critical thinking skills. Students will be presented a framework for critically analyzing data. This framework will be applied through a variety of activities and readings from an array of disciplines. (D)

See the ASU web page (www.astate.edu) for current bulletin information.
1001. Restart Seminar  Designed to provide students in academic distress a means to examine their transcript, study habits, and long-term academic goals through necessary academic advising and effective decision-making. Case studies, class discussion, and journal assignments provide an opportunity to apply new skills for consistent and long-term success. Enrollment limited to students on academic suspension or by referral from the Admissions and Credits Committee. (F,S)

1002. Introduction to Leadership Development  Designed for students who participate in student organizations and who have an interest in developing their leadership skills. Students enrolled in the course will be exposed to increased opportunities for growth in self-awareness, knowledge of structure and function of leadership roles and in skills related to leadership practices. (May be repeated for credit.) (F)

1002. (2 002 2) Strategies for College Success  A freshman course to teach students techniques, skills, and strategies which will improve their grades, increase their chances for retention, and enhance their college experience. Numerous effective study, listening, note taking, and test taking methods are taught. In addition, students are taken on tours of various resource areas such as the library and Computer Services, and other campus and student concerns are addressed. (F, S, SU) Note: Fall classes are limited to students whose ACT Composites are below 19. Spring and summer classes are open to all students as an elective. (F, S, SU)

3012. Seminar in Leadership Development  Designed for junior and senior level students leaders who have held or currently hold positions of significant responsibility or have successfully completed the Introduction to Leadership Development course. Students in the course will be exposed to issues and concepts relative to organizational development. Students will be expected to participate in campus leadership activities. (S)

480V. Special Problems in Leadership Development  Individual problems in Leadership Development arranged in conjunction with the instructor. (Must be approved by dean.) No prerequisites. Can be taken for 1, 2 or 3 hours of credit. Course offered each semester. (D)

Page 98 was blank Tab for Agri.

See the ASU web page (www.astate.edu) for current bulletin information.

College of Agriculture

Professor Gregory C. Phillips, Dean
Professors Armah, Brinkley, Greenwalt, W. Humphrey, Muir, Teague; Associate Professors Agnew, Baker, Kennedy, Pittcock, Shimway; Assistant Professors Awika, K. Humphrey, Widick; Instructors Fenner, Watson

MISSION STATEMENT

To prepare young men and women for entry and career advancement in the food, fiber and natural resources industry, which involves production (farming), agribusiness and value-added processing, public service and rural leadership;

To conduct problem-solving research related to crop and livestock production, natural resource management, and value-added processing in collaboration with private and other public sector entities;

To provide educational opportunities and experiences for transfer of knowledge in classrooms and adult continuing education;

All within environmentally sound and sustainable systems.

COLLEGE OF AGRICULTURE CORE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 1003</td>
<td>Introduction to Agricultural Business</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 1211</td>
<td>Introductory Seminar in Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>AGRI 2023</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 3012</td>
<td>Seminar in Leadership Development</td>
<td>1</td>
</tr>
<tr>
<td>ACCT 2013</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 3123</td>
<td>Organizational Behavior OR/OMGMT 3123, Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 4003</td>
<td>Managerial Accounting OR/AGEC 4063, Financial Analysis of Agribusiness</td>
<td>3</td>
</tr>
<tr>
<td>LAW 2023</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>AGE 4085</td>
<td>Agricultural Policy and Current Issues</td>
<td>3</td>
</tr>
</tbody>
</table>

At least 6 credits from the following list:

- PSSC 2613, Soils
- AGRI 2233, Agriculture and the Environment
- AGED (any 3 cr.)

Major in Agricultural Business
Bachelor of Science in Agriculture

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 46-49

College of Agriculture Core Courses:
(see page 95) 22

Major Requirements:

- MIS 1503, Microcomputer Applications 3
- ACCT 2003, Principles of Accounting I 3
- ACCT 2013, Principles of Accounting II 3
- AGEC 4075, Agricultural Business Management 3
- ECON 2323, Principles of Microeconomics 3
- MKTG 2113, Marketing 3
- MGMT 3153, Organizational Behavior OR/OM 3123, Principles of Management 3
- ACCT 4003, Managerial Accounting OR/AGEC 4063, Financial Analysis of Agribusiness 3
- AGEC 4033, Agricultural Law 3
- LAW 2023, Legal Environment of Business 3
- AGE 4085, Agricultural Policy and Current Issues 3

Emphasis Area:

Student may select from one of the following career specialty areas or consult an advisor and design a program to meet the student’s particular career goals 18
Agricultural Communications:  
Sem. Hrs.  
JOUR 2013, News Reporting ................................................................. 3  
JOUR 2003, Feature and Magazine Article Writing ....................... 3  
JOUR 3023, Advertising and the Print Media .................................. 3  
Electives in Communications ............................................................... 9  
Total 18

Agricultural Finance:  
Sem. Hrs.  
AGEC 4053, Agricultural Finance .................................................... 3  
ECON 3203, Money and Banking ..................................................... 3  
FIN 3713, Business Finance .............................................................. 3  
Electives in AGEC, FIN, ECON, etc. .................................................. 9  
Total 18

Farm Management:  
Sem. Hrs.  
AGEC 3053, Commodity Futures Markets .................................... 3  
AGEC 4013, Farm Appraisal .............................................................. 3  
AGEC 4053, Agricultural Finance .................................................... 3  
Electives in PSSC, ANSC, AGEN, etc. ................................................. 9  
Total 18

Agricultural Marketing and Management:  
Sem. Hrs.  
AGEC 3053, Commodity Futures Markets .................................... 3  
AGEC 4023, International Commodity Marketing ....................... 3  
MKTG 3043, Retailing OR AGEC 3063, Agricultural Sales and Services ................................................................. 3  
Electives in AGEC, MKTG, MGMT, etc. ........................................... 9  
Total 18

Agricultural Economics:  
Sem. Hrs.  
ECON 3313, Microeconomic Analysis ............................................ 3  
ECON 3303, Macroeconomic Analysis ............................................ 3  
OM 3523, Operations Management ............................................... 3  
MATH 2143 Business Calculus ....................................................... 3  
Electives in MATH, ECON, MGMT, AGEC, etc. .......................... 6  
Total 18

Electives:  
13

Total 129-132

Major in Agricultural Education  
Bachelor of Science in Agriculture

Specific General Education Requirements:  
Sem. Hrs.  
ENG 1003, Freshman English I ......................................................... 3  
ENG 1013, Freshman English II .......................................................... 3  
ENG 2003, Introduction to Literature of the Western World I ........ 3  
ENG 2013, Introduction to Literature of the Western World II ...... 3  
SCOM 1203, Oral Com OR PHIL 1103, Intro to Philosophy. OR PHIL 1503, Logic & Practical Reasoning 3  
MATH 1003, College Algebra ............................................................... 3  
CHEM 1013, General Chemistry ....................................................... 3  
CHEM 1011, Lab for General Chemistry I ...................................... 1  
BIOL 1003, Biological Science .......................................................... 3  
BIOL 1001, Lab for Biological Science ........................................... 1  
HIST 2763 OR 2773, The United States OR Since 1876 OR POSC 2103, Intro to US Government .................. 3  
HIST 1013 OR 1023, World Civilization OR Since 1690 .......... 3  
PE 1002, Concepts of Fitness ............................................................ 2  
MUS 2003 OR THEA 2303 OR ART 2503 (only 3 hours required for education majors) ................. 2  
ECON 2153, Principles of Macroeconomics OR ECON 2333 Economic Issues & Concepts ........... 3

PSY 3703, Educational Psychology (listed under the major in AG Ed, counts as a Gen Ed course & also in the major) ... 3
Enhancements ................................................................. 3-6
Total 46-49

BSA Core-Agriculture:  
Sem. Hrs.  
AGEC 1003, Introduction to Agriculture Business ....................... 3  
PSSC 1303, Introduction to Plant Science ....................................... 3  
ANSC 1613, Introduction to Animal Science .................................. 3  
PSSC 2813, Soils ............................................................................ 3  
AGRI 1211, Seminar ....................................................................... 3  
AGRI 3711, Seminar ....................................................................... 1  
AGRI 3721, Seminar ....................................................................... 1  
AGRI 4721, Seminar ....................................................................... 1  
AGED Elective ............................................................................. 3
Total 22

AGED Major:  
Sem. Hrs.  
Required Courses:  
ZOLC 1001, Laboratory for Principles of Zoology AND .......... 1  
ZOOL 1003, Principles of Zoology OR ........................................... 3  
BOT 1103, General Botany AND BOT 1101, Laboratory for General Botany ..................................................... 3  
CHEM 1033, Introduction to Organic and Biochemistry AND .... 3  
CHEM 1031, Laboratory for Introduction to Organic and Biochemistry ................................................................. 1
Total 11

AGED Major:  
Sem. Hrs.  
Required Professional Education Courses:  
AGED 1411, Introduction to Agricultural and Extension Education ................................................................. 1
PSY 3703, Educational Psychology Counted in Gen Ed ................................................................. 3
AGED 4462, Agricultural Youth Organizations ........................................... 2
AGED 4453, Methods of Teaching Agricultural Mechanics .......................... 3
VOED 4503, Foundations of Adult Education in Vocational Education ..................................................... 3
AGED 1403, Basic Agricultural Mechanics ........................................... 3
The following exams are required:  
Praxis I - Required for admission into Teacher Education Program and for all Emphasis Areas ................................................................. 16
Praxis II - Required for graduation for the Teaching Emphasis Option only ................................................................. 16
Total 127-130

Emphasis: Teaching  
Sem. Hrs.  
TAGS 4825, Teaching Internship in the Secondary School .......... 12
EDAG 4625, Special methods for Teaching Agricultural Education ................................................................. 3
Three of the following courses:  
AGED 2433, Principles of Agricultural Power; Electricity and Internal Combustion Engines ........... 3
AGED 2453, Application of Welding Technologies to Agriculture ................................................................. 3
AGED 3443, Agricultural Equipment Hydraulic Systems ................................................................. 3
AGED 3453, Agricultural Structural Systems ................................................................. 3
The following exams are required:  
Praxis I - Required for graduation for the Agricultural Education Program ................................................................. 16
Total in option 24

See the ASU web page (www.austate.edu) for current bulletin information.
Major in Agricultural Science
Bachelor of Science in Agriculture

General Education Requirements:
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 ........................................ 46-49

Note the specific General Education Requirements for this major in the categories listed below:

Critical Thinking:
Must select SPCH/SCOM 1203, Oral Communication as their choice in this category

Social Sciences:
Must take either ECON 2313, Principles of Macroeconomics or ECON 2333, Economic issues and Concepts as one of their choices in this category

Science
Life Sciences:
Must select from one of the following: BIOC 1020, Microbiology; and BIOC 2101, Laboratory for Microbiology for Nursing and Allied Health OR BIOC 4014, Microbiology (Pre-Vet majors).

In order to receive General Education credit for either of these microbiology courses, students with this major must take ZOOL 1043, Biology of Animals and ZOOL 1041 Laboratory for the Biology of Animals. (Note that the credit hours for the ZOOL courses will NOT count toward the total General Education hours.)

Physical Sciences:
Must select ENSC 1013, General Chemistry I, and CHEM 1011, Laboratory for General Chemistry I as their choice in this category.

Enhancements:
Must select ENGI 3233, Technical Writing as their choice in this category. Note that the students who do not achieve satisfactory scores on the General Education Mathematics assessment will face additional restrictions on choices in this area and may not be able to count this course among their General Education Credit hours.

College of Agriculture Core Courses:
(see page 98) ......................................................................................................................................................... 22

See the ASU web page (www.astate.edu) for current bulletin information.
Major Requirements:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGED Electives</td>
<td>12</td>
</tr>
<tr>
<td>ANSC Electives</td>
<td>12</td>
</tr>
<tr>
<td>PSSC Electives</td>
<td>12</td>
</tr>
<tr>
<td>CHEM 3111, Laboratory for Organic Chemistry II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3113, Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3101, Laboratory for Organic Chemistry I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3103, Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1023, General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture, Upper-level courses</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>13</td>
</tr>
</tbody>
</table>

Sem. Hrs. 129-132

Emphasis Area

Major in Plant Science  
Bachelor of Science in Agriculture

College of Agriculture Core Courses:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Requirements:</td>
<td></td>
</tr>
<tr>
<td>AGRI 2213, Genetic Improvement of Plants and Animals</td>
<td>3</td>
</tr>
<tr>
<td>BOT 1103, General Botany</td>
<td>3</td>
</tr>
<tr>
<td>BOT 1101, Laboratory for General Botany</td>
<td>1</td>
</tr>
<tr>
<td>ENT 3003, General Entomology</td>
<td>3</td>
</tr>
<tr>
<td>ENT 3001, Laboratory for General Entomology</td>
<td>1</td>
</tr>
<tr>
<td>BOT 3142, Plant Pathology</td>
<td>2</td>
</tr>
<tr>
<td>AGEC 3063, Computedized Agricultural Records OR MIS 1503, Microcomputer Applications</td>
<td>1</td>
</tr>
<tr>
<td>PSSC 3313, Plant Disease Management</td>
<td>1</td>
</tr>
<tr>
<td>PSSC 2811, Soil Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PSSC 1301, Laboratory for Plant Science</td>
<td>1</td>
</tr>
<tr>
<td>PSSC 4313, Plant Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

Sem. Hrs. 38-39

Electives  

Sem. Hrs. 11-14

Total 129

See the ASU web page (www.asate.edu) for current bulletin information.
Associate of Applied Science in Food Technology

The Associate of Applied Science in Food Technology provides an understanding of the selection, preservation, processing, packaging, distribution and use of safe, nutritious and wholesome foods. Students will be able to integrate and apply food principles through the use of computer, laboratory, statistical and quality assurance techniques. Communication, organizational, information acquisition and interactions skills are also built into the curriculum.

The program was designed with input from representatives of the following local food industries: Riceland Foods, Inc., ConAgra Foods, Busch Agricultural Resources and Nestlé USA. Input was also received from the Department of Food Science, University of Arkansas-Fayetteville. This program was designed to provide a quality curriculum that introduces students to the world of food technology and provides an educational foundation for upper division study in food science. As part of the curriculum, there is an opportunity for laboratory experiences at local food industries as well as student practicum work through student internships. Cooperation with the community agencies will support those endeavors.

Major in Applied Science in Food Technology

Associate in Science

General Education Requirements:

Sem. Hrs.
Sea General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 ................................................. 19

Major Requirements:

Sem. Hrs.
AGRI 2203 or FDSC 1103 at UAF Intro to Food Science ................................................................. 3
FDSC 2003 Food Safety and Sanitation - UAF on-line ................................................................. 3
TECH 2883, Quality Control ........................................................................................................... 3
AGRI 2553, Intro to Food Processing/Lab .................................................................................... 3
AGRI 2523, Food Grades and Standards .................................................................................... 3
AGRI 330V, Practicum .................................................................................................................... 3
18

Required Support:

Sem. Hrs.
CMST 1013/11 Gen Chem I and Lab ............................................................................................... 4
AGRI 3233 Agriculture Statistics ........................................................................................................ 3
ASEC 3013, Computerized Ag Records ............................................................................................ 3
BSYS 2563, Business Communications ....................................................................................... 3
NURS 2003, Nutrition .................................................................................................................... 3
MGMT 3123, Principles of Management ....................................................................................... 3
BIOC 2103/1 Microbiology and Lab ............................................................................................... 4
ECON 2313, Principles of Macroeconomics .................................................................................. 3
26

Electives

6

Total 69

Associate in Science in Technical and Vocational Education

The Associate in Science degree in Technical and Vocational Education is designed as a two-year program of study for Vocational-Technical instructors who do not hold a degree. The degree program is for the purpose of enhancing the instructor’s teaching skills and his/her professional improvement and/or advancement. To be eligible for enrollment in this degree program, persons must be licensed or certified in their skill area.

Major in Technical and Vocational Education

Associate in Science

General Education Requirements:

Sem. Hrs.
ENG 1003 and 1013, Freshman English I and II ............................................................................. 6
MATH 1023, College Algebra ............................................................................................................ 3
HIST 2763 OR 2773, The United States To OR Since 1876 .............................................................. 3

See the ASU web page (www.astate.edu) for current bulletin information.
2223. Introduction to Food Processing
Introduction to the concepts and application of food processing techniques. Concepts include processing of cereals, vegetables, fruits and animal products. Lecture two hours. Laboratory two hours per week (S, F, or SU)

2243. Feeding the Planet
Emphasizes the historical background, current and future social, political, environmental or economic implications for the use of natural resources for feeding the world population. (D)

2353. Food Grades and Standards
Introduction to the grades and standard systems for the food processing industry. Concepts include specific characteristics associated with federal standards for the evaluation of cereals, vegetables, fruits and animal products. Specific government regulations governing grades and standards will also be discussed. (D)

3203. Animal and Plant Metabolism
The study of biochemicals and metabolic processes and their role in the production of animals and plants for food and fiber. Prerequisites: CHEM 1013 and 1011, BIOL 1001 and 1003. (S, F, or SU)

3233. Applied Agricultural Statistics
Collection, tabulation, and analysis of agricultural data; activities of the state and federal crop reporting services. (S, F)

330V. Food Technology Practicum
This course provides opportunities for student internship programs at food processing companies, or for independent study programs under the direction of a faculty member. Each Practicum must be approved in advance by the supervising faculty member, college committee, and the Dean of Agriculture, including a written proposal describing the activities to be performed, location, specific learning experiences anticipated, and manner of supervision. (May be taken for a maximum of 3 hours) (D)

3711. Seminar in Agriculture: Information Literacy
Enhances the ability to utilize primary, secondary, and popular sources of agricultural science information, and to recognize their different values. Written and verbal scientific communications exercises use resume building and discussion of controversial agricultural issues. (F, S)

3721. Seminar in Agriculture: Interpretation of Research
Enhances the ability to understand and interpret primary scientific literature on agricultural science topics in fine detail. Scientific verbal and written communications skills are reinforced using major-specific materials. Prerequisite: AGRI 3711 with grade of “C” or better. Corequisite: AGRI 3233, STAT 3233, or QM 2113. (F, S)

4201-6. Internships in Agriculture
Provides field based experience in private business/industry or public agencies which will enhance knowledge and skills needed for career advancement (approval of Internship Committee required). (S, F, SU)

4223. Agriculture and the Environment
This course will explore the complex and varied interrelationships of agriculture and the environment with the ultimate goal of identifying viable procedures to make agricultural programs more sustainable. (S, F)

4233. Experimental Agricultural Statistics
Fundamental concepts of experimental and statistical methods as applied to agricultural research. (S - even)

4243. Capstone Agriculture
Course provides opportunity to address current issues that impact agriculture, society and the world. The course is designed for the senior class student. (F, S)

4721. Seminar in Agriculture: Professional Presentations
Enhances the ability to synthesize high quality information from multiple sources into different types of written and verbal presentations as encountered in professional settings, using problem-solving exercises. Analytical skills and interactive discussions are emphasized. Prerequisite: AGRI 3721 with grade of “C” or better. (F, S)

Agricultural Business and Economics (AGEC)

1003. Introduction to Agricultural Business
Structure and organization of agricultural business. Basic economic principles and their application to agriculture. (F, S)

3003. Agricultural Marketing
Present and alternative systems of marketing farm products. The principles, functions, channels, and agencies involved are described. Emphasis is on measurement of demand, costs, and efficiencies. Prerequisite: AGEC 1003 or ECON 2313 or ECON 2323. (F, S)

3013. Computerized Agriculture Records
Selection of appropriate systems for farm records and agribusiness applications, computerized business accounting, spreadsheets and decision aids, and word processing applications for reports and communications. Prerequisite: AGEC 1003 or instructor approval. (F, S)

3023. Cooperatives
Organization, capitalization, and management of cooperative businesses. Operational practices and problems. Role of cooperative organizations in agricultural business. Prerequisite: AGEC 1003 or ECON 2313 or ECON 2323. (S - odd)

3043. Marketing Specialty Agricultural Products
Introduction to marketing high value crops, processed agricultural goods, and specialty items. Topics will include market analysis and testing, financing, pricing, and transportation. Prerequisite: AGEC 1003 or MKTG 3013. (D)

3053. Commodity Futures Markets
Function of futures markets in price discovery, price-risk transfer, and speculation. Marketing strategies for agricultural, financial, and other commodities using futures contracts and options on futures. Prerequisite: AGEC 1003 or ECON 2313 or ECON 2323. (F - odd)

3063. Agricultural Sales and Services
The history, image and economic importance of agricultural sales and consulting are emphasized; nature and functions of contemporary, professional sales and consulting; selling process, as applied to agricultural inputs, products and the food and fiber industry. Prerequisite: AGEC 1003 or ECON 2313. (F)

4013. Farm Appraisal
Factors governing the price of land, methods of land valuation; appraisals for use, sale, loan, and taxation. Prerequisite: AGEC 1003 or ECON 2313 or ECON 2323. (S)

4023. International Commodity Marketing
Development and coordination of activities related to marketing agricultural commodities in foreign markets. Emphasis given to identification and analysis of market size, location, mix, methods and changes in trading for commodities in international markets. Prerequisite: AGEC 3003, MKTG 3013, or consent of instructor. (S)

4033. Agricultural Law
Farm laws pertaining to land purchases, legal descriptions, leases, mortgages, security agreements, fences, drainage, irrigation, pollution, and quarantines. Prerequisite: AGEC 1003 or ECON 2313 or ECON 2323. (S - odd)

4043. Land Economics
Physical characteristics as related to land use; the economics of land use. Principles of land utilization, classification, conservation, zoning, and land-use planning. Prerequisite: AGEC 1003. (F - odd)

4053. Agricultural Finance
Financial elements of the farm business. Emphasis will be given to the use and sources of agricultural credit. Prerequisite: AGEC 1003 or ECON 2313 or ECON 2323. (S - even)

4063. Financial Analysis of Agribusiness
Study of quantitative concepts and methods used in the financial analysis of the agricultural business firm. Prerequisite: ACCT 2023 or ACCT 2013. (F, S)
4073. Agricultural Business Management  Principles and problems involved in acquiring, organizing, and operating successful farms, ranches and other agricultural businesses; balance of enterprises; capital requirements; emphasis on managerial principles and management simulation. Prerequisite: AGEC 1003 or ECON 2313 or ECON 2323. (F, S)

4083. Agricultural Policy and Current Issues  Economic developments in agriculture; role of the government in agriculture and policies affecting rural people are considered. Text and current information are utilized. Prerequisite: AGEC 1003 or ECON 2313 or ECON 2323. (S)

4191-2-3. Special Problems in Agricultural Economics  For students of senior standing. Approval of the instructor and dean necessary. Credit of one, two, or three hours as arranged. (S, F, SU)

Agricultural Education (AGED) (Special course fee may apply.)

1403. Basic Agricultural Mechanics  Introduction to basic wood and metal working tools and equipment used in most mechanics laboratories. Instruction focuses on safety, project design, tool and equipment use. (Special course fee: $25.00) (F, S)

1411. Introduction to Agricultural and Extension Education  Philosophy, aims, and objectives of agricultural and extension education. Explanation of programs, career opportunities, and qualifications in agricultural and extension education. (F)

2433. Principles of Agricultural Power: Electricity and Internal Combustion Engines  Agricultural power includes electricity and internal combustion engines. Electricity includes systems, devices, motors; installation and service. Internal combustion power includes small engine repair and maintenance. Prerequisite: AGED 1403. (S - odd)

2453. Application of Welding Technologies to Agriculture  Principles and practices of various methods of welding technology applied to agriculture. Lecture two hours, laboratory two hours per week. (F)

3433. Agricultural Equipment Hydraulic Systems  Study of the design, theory of operation, and maintenance of agricultural equipment hydraulic systems. Includes troubleshooting and team solutions to functional system problems. Prerequisites: MATH 1023. (S - even)

3453. Agricultural Structural Systems  Basic carpentry skills associated with the agricultural environment. Focus of instruction is equipment safety and use, building supplies/materials, skills development in framing, roofing, installation of windows, etc. Two hour lecture and two hour laboratory per week. Prerequisite: AGED 1403. (F - odd)

4422. Competency Based Curriculum in Vocational Education  Preparation of a course of study and selection of curriculum content for the competency based format. Developing objectives, organization of content and evaluation strategies. Prerequisite: Admission to Teacher Education. (F)

4433. Methods of Teaching Agricultural Mechanics  Methods and techniques used to teach and organize the mechanics laboratory. Teaching aids will be emphasized. Lecture two hours, laboratory two hours per week. Prerequisite: AGED 1403. (S)

4462. Agricultural Youth Organizations  Introduction to the history, purposes, parliamentary procedure, and membership and awards structure. Emphasis on leadership development and adviser responsibilities to agricultural youth organizations (4-H, FFA). (F)

4591-2-3. Special Problems in Agricultural Education  For students of senior standing. Approval of the instructor and dean necessary. Credit of one, two, or three hours as arranged. (F, S, SU)

Animal Science (ANSC)

1602. Equitation  Two-hour laboratory course in the selection and care of tack, horsemanship, etiquette, grooming, and equitation. (D)

1612. Intermediate Western Equitation  Refinement of the experienced rider's skills in the area of western riding. Includes re-training or conditioning older horses, and understanding equine behavior as it relates to riding and training. Four hours of lab per week. Prerequisite: ANSC 1602 or permission of instructor. (F, S)

1613. Introduction to Animal Science  A study of animals that provide food, fiber, and companionship to mankind, including the history and scope of animal agriculture, products produced by/from animals, reproduction, breeding and genetics, nutrients and digestion, lactation, behavior, and an overview of production systems. (F, S)

1621. Laboratory for Introduction to Animal Science  Students will gain hands-on work experience with managing livestock. (F, S)

1622. Intermediate Huntseat Equitation and Jumping  Refinement of the experienced rider's skills in the area of huntseat riding and jumping. Includes flat work and jumping exercises to build skills and condition the horses and riders for jumping. Four hours of lab per week. Prerequisite: ANSC 1602 or permission of instructor. (F, S)

2602. Principles of Dairying  Introduction to the principles of dairy cattle selection and dairy technology. Lecture two hours. (D)

2623. Equine Health and Management  Course covers aspects of equine health, diseases, soundness, first aid, preventative maintenance, and management of horses in domestic situations. Three hours of lecture per week. (F)

2703. Principles of Poultry Production  Breeding, housing, feeding, incubation, brooding, disease control, and marketing applied to general farm conditions. (S)

3203. Small Animal Care and Management  Science and practice of raising and keeping small animals as pets or companion animals. Topics related to nutrition and feeding, training, reproduction, breeding, grooming, housing and equipment, preventative medicine, and common diseases will be covered. Prerequisites: ANSC 1613 or BIOL 1003 or 1013. (F - odd)

3603. Elements of Meat  Survey and discussion of the red meat industry. Specific emphasis on slaughtering, inspection, carcass grading, byproducts, and preservation. Lecture two hours, laboratory two hours per week. (D)

3613. Nutritional Management of Domestic Animals  Principles of animal nutrition, composition of feedstuffs, diet formulation, and nutritional management of cattle, horses, sheep, swine, poultry, dogs and cats. Two hours lecture, two hours laboratory per week. Prerequisite: ANSC 1613. (F)

3623. Livestock Evaluation and Selection  Evaluation of slaughter livestock to determine carcass merit and production efficiency, and selection of breeding livestock based on visual appraisal, performance and progeny records. Lecture two hours, laboratory two hours per week. Prerequisite: ANSC 1613. (S - odd)
3633. Veterinary Anatomy and Physiology Structure and function of the body in farm animals. Includes lectures on cardiac, renal, respiratory and muscle physiology, neurology, histology, bone development and endocrine control of the above systems. (F)

3653. Meat Science and Processing Study of meat science and meat processing. Properties of fresh and processed meats. Instruction in the preservation of meat and meat products, including "hands-on" experience in processed meat manufacturing, curing, and barbecuing. (S -even)

3663. Sheep Production Methods of management in producing sheep and handling of purebred flocks. Lecture two hours, laboratory two hours per week. Prerequisite: ANSC 3613. (S)

3693. Artificial Insemination Reproductive physiology as related to artificial insemination; techniques of collection, evaluation, dilution, storage of semen, insemination and application including advantages, limitation, and cost. Lecture two hours, laboratory two hours per week. (D)

3703. Poultry Flock Management Management of laying and brooding flocks; raising of replacements; study of all economic factors relating to efficient production and marketing. Lecture two hours, laboratory two hours per week. Prerequisite: ANSC 2703. (D)

3723 Poultry Diseases Common diseases of poultry; their detection, prevention, and treatment. (D)

4603. Swine Production Basic principles and their application in pork production—breeding, selection, nutrition, housing, equipment, and economic management. Prerequisite: ANSC 3613. (S)

4613. Horse Production Selection, breeding, feeding, management, marketing of horses, and equitation. Lecture two hours, laboratory two hours per week. Prerequisite: ANSC 3613 or approval of dean. (F)

4623. Beef Cattle Production Management practices of commercial and purebred herds. Lecture two hours, laboratory two hours per week. (S)

4633. Diseases of Farm Animals Prevention, treatment, and control of common diseases, including problems of hygiene and sanitation. Prerequisite: ANSC 3633. (D)

4643. Techniques of Animal Production Practical work with herds. (Required of all animal science majors.) Laboratory three hours twice weekly. (D)

4663. Principles of Breeding Basic application of genetic principles to the improvement of farm animals. (F)

4673. Digestive Physiology and Nutrition of Domestic Animals The role of nutrients and physiological and metabolic mechanisms involved in nutrient utilization by domestic animals. Emphasis on food producing animals, horses, dogs, cats, and catfish. Prerequisite: ANSC 1613 and junior classification. (S)

4683. Theriogenology Teaches the anatomy, physiology, endocrinology, and biochemistry of reproduction in farm animals. Introduces students to methods of manipulating reproduction within livestock systems. Management topics include artificial insemination, estrus synchronization, induction of parturition, embryo transfer, and reproductive disease prevention. (S)

4691 Laboratory for Advanced Animal Nutrition Designed to provide students with theories and skills associated with nutrition-related laboratory analyses. (D)

4693 Integrated Poultry Management Production principles and problem solving strategies used by vertically-integrated poultry companies. Prerequisite ANSC 2703 or permission of instructor. (F -odd)

4712. Advanced Animal Nutrition Emphasis on computer-aided formulation of diets and supplements for domestic animals (livestock, poultry, pets, exotics and catfish). Class discussions will focus on industrial feed formulation problems, regulatory policies, and biotechnology in the feed industry. Prerequisite: ANSC 3613 and junior classification. (D)

4733. Endocrinology of Farm Animals Endocrinology system and its role in lactation, reproduction, digestion, and metabolism. (D)

4781-2-3. Special Problems in Animal Science Each student will develop a problem in student's special interest field. This group will meet for two hours per week and report the progress on problems. (F, S, SU)

Horticulture (HORT)

2203. Urban Landscaping and Gardening Principles/practices of residential horticulture emphasizing minimum environmental impact. Covers landscape design, maintenance, gardening, turf, interior plants, and pest control. A course designed for non-majors. Lecture 2 hours per week, Laboratory 2 hours per week. (D)

2253. Fundamentals of Horticulture Growth, fruiting habits, propagation, and culture of horticultural plants. Lecture two hours, laboratory two hours per week. (S -odd)

2263. Horticulture Technology In-depth coverage of structures, equipment, and methodologies of modern horticultural industries. Emphasis on greenhouses, storage facilities, irrigation, nutrition, environmental control, weed, disease, and pest control. Lecture 2 hours per week, Laboratory 2 hours per week. Prerequisite: HORT 2253 or PSSC 1303 or BOT 1103. (D)

2273. Vegetable Crops Production Growth habits, soil and climate requirements, varietal characteristics, and pests of vegetable crops. Prerequisite: HORT 2253. (D)

3253. Urban Forestry The biology, selection, management, and role of plants and ecosystems used to enhance the aesthetics and function of urban environments. Planning, management and administration of urban forests. Prerequisite: BIOL 1003 or BOT 1103 or HORT 2253. (F -odd)

3263. Pomology Fruit production; fruiting habits; establishment and management of deciduous orchards. Lecture two hours, laboratory two hours per week. Prerequisite: HORT 2253. (D)

3273. Turf Management The turf industry; characteristics, adaptation, and establishment of the grasses. Prerequisites: PSSC 2813, PSSC 2811, and HORT 2253. (F -even)

3283. Landscape Management Principles and practices for the establishment and maintenance of residential and commercial landscapes. Lecture two hours, laboratory two hours per week. Prerequisite: BIOL 1003 or BOT 1103 or HORT 2253. (D)

3293. Landscape Plant Materials Trees and shrubs and their uses in landscape. Lecture two hours, laboratory two hours per week. (F)

4253. Greenhouse Management Construction, operational practices, and general management of greenhouses and associated structures. Lecture two hours, laboratory two hours per week. Prerequisite: HORT 2253. (S -odd)

4263. Floriculture Principles and practices of production of commercial flower crops in the greenhouse and field. Lecture two hours, laboratory two hours per week. Prerequisite: HORT 2253. (D)

4273. (4 281 3) Nursery Management Principles and practices involved in the production, management, and marketing of field-grown and container-grown nursery plants. Lecture two hours, laboratory two hours per week. Prerequisites: HORT 2253 and HORT
Plants and Soil Science (PSSC)

1301. Laboratory for Plant Science  Introduction to agronomic and horticultural concepts related to crop anatomy, growth and development, physiology, and pest identification and management. (S)

1303. Introduction to Plant Science  Agronomic and horticultural cropping systems including crop growth and development, crop physiology, crop ecology, environmental considerations, and production/pest management practices. (F, S)

1323. Agricultural Chemicals  Introduction to the types and uses of agricultural pesticides, fungicides, and herbicides. Application technology, calibration, safety issues, and pest management tactics are examined. Prerequisites: CHEM 1013 and CHEM 1011. (D)

2803. Field Crops  Field crops, types and varieties. Lecture two hours, laboratory two hours per week. (D)

2813. Soils  Origin, classification, physical and chemical properties of soil. Prerequisite: CHEM 1013 and CHEM 1011. Corequisite: PSSC 2811. (F, S)

2811. Soils Laboratory  Corequisite: PSSC 2813. (F, S)

3313. Plant Disease Management  Introduction to management of plant diseases. Major concepts include genetic, cultural, and biological controls as related to management of plant systems. Self-study course utilizing computer technology, seminars, and laboratory exercises. Prerequisites: PSSC 1303 or BOT 1103. (S)

3323. Weeds and Weed Control  Identification and pest management of weeds in agronomic, horticultural, and urban systems. Survey of herbicides, their chemistry, toxicology, modes of action, uses, and environmental impact. Lecture two hours and laboratory two hours per week. Prerequisites: CHEM 1013 and PSSC 1303. (F)

3333. Plant Breeding  History of plant improvement, methods of plant breeding, and the basic application of these methods to various agronomic and horticultural crops. (F -odd)

3503. Agriculture Spatial Technologies I  Basic understanding and utilization of data collection and assessment using global position system receivers, direct and remote sensing, and geographic information system software related to crop production and nutrient management. Prerequisite: PSSC 2813. (F)

3802. Pasture and Forage Crops  Introduction to important forage and pasture crops in the mid-south region. Discussions will include cropping systems, plant growth and development, physiology, and environmental considerations. Prerequisite: PSSC 2813. (F -odd)

4301. Seminar  Reports on recent developments in the plant sciences. (S -odd)

4313. Plant Growth and Development  Auxins, gibberellins, and various other regulators of plant growth; also phenomena such as flowering and dormancy. Prerequisites: CHEM 1033 and CHEM 1031, PSSC 2803, and HORT 2253. (F)

4342. Seed Analysis and Processing  Techniques and principles of seed analysis and grading; methods of producing and processing quality seeds and seed stocks. (D)

4804. Principles of Crop Production  Introduction to agronomic cropping systems which includes production systems, concepts related to crop selection and genetics, establishment and management of the crop, and harvest management. Environmental issues related to crop production and sustainability are also evaluated. Prerequisites: PSSC 1303 and PSSC 2813. (F)

4813. Soil Fertility  Principles involved in maintaining and increasing fertility of soil. Prerequisite: PSSC 2813. (S -even)

4822. Environmental Factors Affecting Plant Growth  Affect of environmental factors on growth of important crop species. Primary emphasis will be on water utilization, solar irradiance, and temperature on plant development. Methods of measurement of environmental factors will be included. Prerequisites: BOT 1103, PSSC 1303, PSSC 2813. (D)

4833. Soil Classification  Development and classification of soils, including identification and mapping. Lecture two hours, laboratory two hours per week. Prerequisite: PSSC 2813. (F -even)

4842. Fertilizers  Commercial fertilizers in relation to soil fertility. Prerequisite: PSSC 2813. (S -even)

4853. Soil and Water Conservation  Properties of soil which affect erosion and water infiltration, with practical methods of holding water and soil. Prerequisite: PSSC 2813. (S -odd)

4863. Soil Chemistry  Chemical properties of soils and determination of several elements. Lecture two hours, laboratory two hours per week. Prerequisite: PSSC 2813. (F -odd)

4873. Soil Physics  Soil physical properties and measurements, with emphasis on the relation to plant growth. Lecture two hours, laboratory two hours per week. Prerequisite: PSSC 2813. (D)

4883. Soil Microbiology  Soil organic matter in relation to soil organisms. Prerequisite: PSSC 2813. (S -even)

4891-2-3. Special Problems in Plant and Soil Science  For students of senior standing to work on special problems. Approval of instructor and dean necessary. (F, S, SU)

Technical and Vocational Education (VOED)

1503. Instructional Planning and Materials in Technical and Vocational Education  Provides knowledge and procedures for the development of instructional units, the preparation of lesson plans, and the selection and preparation of instructional materials necessary to teaching in a technical or vocational setting. (D)

1513. Methods of Technical and Vocational Teaching  Methods of teaching are introduced and studied, with emphasis on the application of those methods in a technical or vocational school setting. (D)

1533. Student Services in Technical and Vocational Education  The role of student organizations in the technical or vocational program is studied, with emphasis on the establishment and/or operation of a student organization as an integral component of a technical or vocational school program. (D)
1543. Evaluation of Learning Methods for measuring student learning, determining letter grades, and evaluating overall instructional effectiveness as applied to a technical or vocational setting are presented. (D)

1553. Management of Technical and Vocational Programs Various management tasks essential to effective technical and vocational instruction and program development are presented and studied with emphasis on their application in a technical or vocational school setting. (D)

2503. Program Development Various activities pursuant to the design, development, promotion and evaluation of technical and vocational programs are presented and studied with emphasis on their application in a technical or vocational school setting. (D)

2523. The Two-Year College in America An examination of the history, philosophy, nature, and function of the two-year college. (D)

2533. History and Philosophy of Technical and Vocational Education An examination of the history and philosophy of technical education in America with a special emphasis on Arkansas’ emerging technical colleges. (D)

2551. Experiential Learning in Technical and Vocational Education Covers professional work experience and/or technical preparation in the vocational teaching area in which the student is currently employed. Prerequisite: All requirements for the associate degree in technical and vocational education must be fulfilled prior to any award of credit for this course. (D)

2552. Experiential Learning in Technical and Vocational Education Covers professional work experience and/or technical preparation in the vocational teaching area in which the student is currently employed. Prerequisite: All requirements for the associate degree in technical and vocational education must be fulfilled prior to any award of credit for this course. (D)

2554. Experiential Learning in Technical and Vocational Education Covers professional work experience and/or technical preparation in the vocational teaching area in which the student is currently employed. Prerequisite: All requirements for the associate degree in technical and vocational education must be fulfilled prior to any award of credit for this course. (D)

2558. Experiential Learning in Technical and Vocational Education Covers professional work experience and/or technical preparation in the vocational teaching area in which the student is currently employed. Prerequisite: All requirements for the associate degree in technical and vocational education must be fulfilled prior to any award of credit for this course. (D)

4503. Foundations of Adult Education in Vocational Education Covers historical and philosophical development; comparison of vocational and non-vocational adult education; program development and evaluation, teaching methods, and issues and trends in adult vocational education programming. (S -even)

4513. Hands-On Activities and Observation Experiences for Career Orientation Opportunity to study, develop, and demonstrate the essential facets of hands-on activities according to the instructional material in career orientation. (SU)

4522. Competency Based Curriculum in Vocational Education Study of the design features of a competency based approach to education with emphasis on practical application to the design of instruction using a competency based format. (F)

4533. Methods of Organizing and Teaching Career Orientation Curricula, methods, and techniques involved in teaching career orientation as related to the fifteen occupational clusters in the world of work. (SU)

4553. Educators in Industry A course devoted to career awareness in relation to the modern workplace. The course is conducted in cooperation with local businesses and industries. Research, on-site instruction, and work experiences are involved. (D)

4573. Problems in Teaching Cooperative Education Teaching cooperative education in all vocational services of program areas; history, purposes, administration, methods, organization, and conduct of the programs. (D)

4583. Methods and Materials for Teaching the Adult Emphasis on the methodologies, techniques, and materials applicable to the adult learner based upon his personal needs. (D)
College of Business

Professor Jan W. Duggar, Dean
Professor C. William Roe, Associate Dean

The mission of the ASU College of Business is to provide high-quality management education to traditional and non-traditional students in the MidSouth and to provide support for businesses and communities through research, economic development activities, and consultative services.

The college strives to build challenging programs of excellence with emphasis on leadership/values, international business, technology, entrepreneurship, and economic development through an educational process that fosters analytical thinking, problem solving, communication skills, and experiential learning. Emphasis is placed on undergraduate education, while meeting the needs of the business community through select graduate degrees and professional workforce development programs.

The college is committed to enhancing professional development of faculty and staff through support of applied research, instructional development, and professional growth activities in a collegial environment. Professional development is also provided to students through student organizations, honor societies, and action-based learning.

The Mission is strengthened through ongoing review and continuous improvement of all programs and activities.

Because knowledge of technology is essential to success in business, the college provides three modern computer labs for student use. To broaden their educational experiences, students may become involved in auxiliary and outreach activities through the Transportation Management Program, Small Business Development Center, Economic Education Program, and seminars.

The College of Business is comprised of four academic departments: Accounting and Law, Economics and Finance, Computer and Information Technology; and Management and Marketing. Through these departments, the college offers 10 baccalaureate degrees and an associate degree program. The Delta Center for Economic Development is the outreach branch of the college. This center provides students with the opportunity to participate in various college initiatives to partner with the business community to enhance the economic growth and development of the region and state.

Four graduate degrees are available in the College of Business: the Master of Business Administration (MBA), the Master of Accountancy (MACC), the Master of Science in Information Systems and eCommerce (MSIeC), and the Master of Science in Education (MSE), which is offered in conjunction with the College of Education. Students should refer to the Graduate Bulletin for complete details about these programs.

DEGREE REQUIREMENTS

Baccalaureate Degrees

Except for business technology majors, College of Business students who meet the prescribed degree requirements will be awarded the Bachelor of Science degree. Students majoring in business technology will be awarded the Bachelor of Science in Education degree upon completion of their degree requirements. Students following a program leading to a degree in the College of Business are required to complete a minimum of 46 semester hours of General Education requirements, as well as the specific major requirements for the Bachelor of Science degree. Considerable latitude is permitted in the selection of the additional elective courses necessary to attain the degree. For the Bachelor of Science in Education, refer to the Teacher Education Program under the College of Education.

In addition to meeting the University Requirements for all Baccalaureate Degrees (pages 48 and 49) as presented by the university, any candidate for a degree in the College of Business must also meet the following specific requirements:

1. Maintain a minimum GPA of 2.25 or a grade of at least a "C" for each course in the College of Business core courses, based on the last grade earned in each course.
2. Maintain a minimum GPA of 2.50 or a grade of at least a "C" for each required course in the major, based on last grade earned in each course.
3. Maintain an overall GPA of 2.25.
4. Complete at least 30 of the last 36 semester hours in courses offered by ASU-Jonesboro. At least 50 percent of the business credit hours required for a baccalaureate degree and 50 percent of business courses required for a major in business must be earned in the ASU-Jonesboro College of Business.
5. Take freshman and sophomore courses prior to taking junior and senior business courses. The student must earn 45 junior/senior hours. No upper-level degree credit will be given for courses taken prior to the completion of 54 semester hours of earned credit.

A College of Business student may take a double major in business. She/he may also elect a business minor, in consultation with his/her advisor. Students majoring in the College of Business may not minor in Business Administration. Students not majoring in the College of Business will receive credit for no more than 30 hours of course work offered by the College of Business.

**COMPUTER PROFICIENCY**

All candidates for baccalaureate degrees in the College of Business are required to demonstrate proficiency in basic computer skills in order to be awarded the degree. This proficiency must be satisfied prior to enrolling in any upper division College of Business courses and before enrolling in QM 2113 — Business Statistics.

Each student will be required to demonstrate proficiency in the use of: Microsoft Word, Excel, Powerpoint, and Access. The specific components of this requirement will be continually based upon industry expectations and academic needs.

The computer proficiency can be satisfied in one of two ways, (1) completing MIS 1503 — Microcomputer Applications (or its equivalent) with a grade of "C" or better, or (2) passing the College of Business hands-on exam to be offered each semester or administered as part of the introductory computer course offered by the Economic Development Division of the College of Business at various times throughout the year. Students will be responsible for paying all fees associated with the option they select.

All candidates for baccalaureate degrees in the College of Business are required to take the following College of Business core courses.

### College of Business Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2003 and 2013, Principles of Accounting I and II</td>
<td>6</td>
</tr>
<tr>
<td>BSYS 2553, Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2313, Principles of Macroeconomics*</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ECON 2323, Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3713, Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>LAW 2023, Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 3153, Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 4813, Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MIS 3013, Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3013, Marketing</td>
<td>3</td>
</tr>
<tr>
<td>QM 2113, Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 1203, Oral Communication (Except International Business Studies)</td>
<td>3</td>
</tr>
</tbody>
</table>

* Required ONLY if not taken to satisfy a part of the (-) Must be completed before enrolling in junior/senior level classes.

**General Education Requirements.**

### College of Business Minor in Electronic Commerce

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 435V plus choice of MKTG 431V, MKTG 433V, MKTG 434V, MKTG 436V</td>
<td>3</td>
</tr>
</tbody>
</table>

Take all of the following:

- MIS 3433, Database Management
- MIS 4453, Technologies for E-Commerce
- MIS 3353, Web-Development OR JOUR 4373, Internet Communications

Total Hours 18

**Associate Degree**

All candidates for an Associate Degree in the College of Business must satisfy the University Requirements for all Associate Degrees as listed on pages 79-81, as well as the specific degree requirements listed under the MIS major.

**ENROLLMENT IN UPPER-LEVEL COURSES IN BUSINESS**

The College of Business offers upper-level courses (junior/senior level) in a variety of professional fields of business. To be eligible to enroll in any upper-level courses, any business major must first have the proper prerequisites and satisfy the following enrollment requirements: (1) complete 54 semester hours of General Education requirements and all lower-level College of Business courses except for BSYS 2563 and LAW 2023; (2) complete MATH 2143; (3) complete and file a degree plan which is done in consultation with the student's adviser.

Students majoring in fields outside the College of Business may enroll in upper-level courses in business, provided they have the proper prerequisites, and have completed 54 semester hours of credit prior to enrollment. Students not majoring in business are limited to a maximum of 30 semester hours of College of Business courses.

**Department of Accounting and Law**

Associate Professor Tina Quin, Chair; Professors Pittman, Moore; Associate Professors Dancer, Quinn; Assistant Professors Ratliff, Robertson; Instructors Carr, Lewis, Toney-McLin

See the ASU web page (www.astate.edu) for current bulletin information.
ACCOUNTING PROGRAM: The accounting major prepares students for rewarding careers as industrial accountants, cost analysts, controllers, tax accountants, members of financial regulatory teams such as the IRS or banking auditors, independent auditors in CPA firms, and internal auditors. ASU accounting graduates work for manufacturing firms, in government agencies, in banking, and in not-for-profit entities.

The ASU undergraduate degree with accounting major requires 126 course hours. Many states, including Arkansas, currently require 150 hours to sit for the Certified Public Accountant (CPA) exam. The CPA license is only required by law for individuals doing audits; however, many nonauditors wish to pursue the CPA exam as a credential verifying the value of their education. Students interested in the CPA exam should plan an additional 24 hours of credits with their advisor, preferably by beginning work on their Masters of Accountancy (MAcc) degree. See the ASU Graduate Bulletin for details on the MAcc program.

LAW: The law courses in the department do not constitute a major. However, law courses help students better understand the role of the legal system in modern life and are highly recommended for those in any major, and particularly for students considering going on to law school after completion of their undergraduate degree.

Major in Accounting
Bachelor of Science

General Education Requirements:
Sem. Hrs.
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 46-49

Specific General Education Requirements:
Students must complete MATH 2143 with a "C" or better.
Students must complete either SOC 2213 or ANTH 2233

College of Business Core Courses:
Sem. Hrs.
(see page 116) 39-42

Major Requirements:
Sem. Hrs.
ACCT 2003, Principles of Accounting I 6
ACCT 3003, Intermediate Accounting I 3
ACCT 3003, Intermediate Accounting II 3
ACCT 4023, Advanced Accounting and International Issues 3
ACCT 4033, Accounting Information Systems 3
ACCT 4053, Auditing I 3
LAW 4033, Law of Commercial Transactions or LAW 4043, Law of Business Organizations 3
Electives 3
Total 27

Electives:
Sem. Hrs.
16-13
Total 126

Minor in Accounting
Sem. Hrs.
ECON 2333, Economics Issues and Concepts, or ECON 2323, Principles of Microeconomics 3
ACCT 2003, Principles of Accounting I 3
ACCT 3013, Principles of Accounting II 3
ACCT 3003, Intermediate Accounting I 3
ACCT 3031, Intermediate Accounting II 3
Junior-Senior Accounting Electives 3
Total 21

See the ASU web page (www.astate.edu) for current bulletin information.

Department of Economics and Finance

Associate Professor Jim Washam, Chair; Professors Brown, Crawford, Dale, Kishering, Marburger; Associate Professors Latanich; Assistant Professors Foster, Guha, Kern, Taylor

The Department of Economics and Finance offers majors in the following areas: Business Administration, Business Economics, and Finance. Each program is designed to train students in the latest techniques available in that area and equip them to perform in a professional manner in their chosen field.

BUSINESS ADMINISTRATION PROGRAM: The major in business administration provides students with a diversified rather than a specialized program in business and economics. It is designed especially for those who need a broad background of training for managing a business of their own or for students planning to enter a large business which maintains its own specialized training program. This program requires a study of every major sector of business activity, with emphasis on creative thinking which will prepare the student for today's employment as well as for meeting tomorrow's challenges.

BUSINESS ECONOMICS PROGRAM: The major in economics provides an excellent background for a wide variety of careers in business and government. In addition to acceptance into their management training programs, many businesses employ the economics major to forecast economic trends and to relate changes in economic activity to the individual business. Economists are employed by various governmental bodies to conduct research into all phases of the economy. (For the major in economics leading to the Bachelor of Arts degree, see page 122.)

FINANCE PROGRAM: The finance major prepares students for positions in banks, investment companies, insurance firms, real estate companies, credit unions, government, and major corporations. Finance major graduates serve as loan officers in banks, manage individual or corporate investment portfolios, or supervise commercial credit departments. Finance majors may choose to specialize in one of four emphasis areas—banking, real estate, insurance, or corporate finance.

Major in Finance
Bachelor of Science

General Education Requirements:
Sem. Hrs.
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 46-49

Specific General Education Requirements:
Each student must complete MATH 2143 with a "C" or better.
Each student must complete either SOC 2213 or ANTH 2233

College of Business Core Courses:
Sem. Hrs.
(see page 116) 39-42

Major Requirements:
Sem. Hrs.
FIN 3763, Financial Institutions and Markets 3
FIN 4723, Investments 3
FIN 4753, Capital Management 3
Total 9

Emphasis Area: (Select one of the following four Emphasis Areas):

Banking:
Sem. Hrs.
ACCT 3003, Intermediate Accounting I 3
ECON 3323, Money and Banking 3
FIN 3773, Financial Risk, Management, Bank Regulation & Environment 3
FIN 4763, Bank Management 3

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
Major in Business Technology Bachelor of Science in Education

General Education Requirements:
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .......................................... 46-49

Specific General Education Requirements:
Students with this major must take the following:

HIST 2753 or 2773, The United States To or Since 1876, as one of the Social Sciences options

MATH 1023, College Algebra

PSY 2013, Introduction to Psychology, as one of the Social Sciences options

SOC 2213, Principles of Sociology

College of Business Core Courses:

Sem. Hrs. (see page 116) ........................................................................................................................................... 39-42

Major Requirements:

BSYS 2543, Keyboarding I ........................................... 3

BSYS 3533, Integrated Software .................................................. 3

MGMT 3613, Leadership ................................................... 3

BSYS 4533, Word Processing II ............................................. 3

BUED 4593, Business Technology Methods ......................... 3

BUED 4513, Directed Field Experiences ................................. 3

Total 18

Students may elect to take the following endorsement:*

Computer Technology - 15 semester hours

- Computer Programming - 3 hours
- Computer Elective - 3 hours
- Computer Applications - 9 semester hours

*All courses to be approved by advisor.

Professional Education Requirements:* Sem. Hrs.

** PSY 3703, Educational Psychology ........................................ 3
** SE 3643, The Exceptional Student in the Regular Classroom .......... 3
** SCED 2514, Introduction to Secondary Teaching ................. 4
** SCED 3515, Performance Based Inst. Design (Junior year) and before EDUB 4533, Methods and Materials in Teaching of Business Technology .......... 5
** EDUB 4533, Methods and Materials in Teaching of Business Technology .......... 5
** SCED 4713, Educational Measurement with Computer Applications 3
** TIBU 4866, Student Teaching in the Secondary School .......... 12

Total 33

* See Bachelor of Science in Education Degree—College of Education

** Prerequisite: Admission into the Teacher Education Program

Additional General Requirements for Teacher Education: Sem. Hrs.

HLTH 2513, Principles of Personal Health ........................................ 3

PE Elective .............................................................................. 1

Total 4

Certificate in Business Information Systems (BIS)

The BIS program is intended to deliver training that provides foundational knowledge in information technology. The resulting certificate is independent of any degree program and can be used either to enhance whatever degree is being pursued by the student or to demonstrate IT accomplishments of the non-degree-seeking student. For the latter, the BIS certificate incorporates a basic communications component, a business foundation component, and a strong basic IT component.

Requirements:

Communications component

ENG 1003, Composition I .................................................... 3

ENG 1013, Composition II .................................................. 1

Total 14

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
Major in International Business
Bachelor of Science

General Education Requirements: Sem. Hrs.

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 46-49

Specific General Education Requirements:

Each student must complete MATH 2143 with a "C" or better.
Each student must complete either SOC 2213 or ANTH 2233

College of Business Core Courses: Sem. Hrs.

(see page 116) 39-42

Major Requirements: Sem. Hrs.

MKTG 3023, Applied Research 3
MKTG 3033, Advertising and Promotion 3
MKTG 3073, Product and Price Strategies 3
MKTG 4053, Supply Chain Management 3
MKTG 4083, Marketing Research Design and Analysis 3
Emphasis Area (Marketing Management or Logistics) 9

Emphasis Area: (Select one of the following emphasis areas) Sem. Hrs.

Marketing Management:

MKTG 4113, International Marketing 3
Select six (6) semester hours from the following course list. At least one (1) course must be from the first nine (9) courses listed. 6

MKTG 3043, Retailing
MKTG 3063, Transportation
MKTG 3093, Professional Selling and Sales Management
MKTG 4013, Service and Non-Profit Marketing
MKTG 4043, Consumer Behavior
MKTG 4053, Electronic Marketing
MKTG 4113, International Marketing
MKTG 4223, Marketing Management
ACCT 4003, Managerial Accounting

BSYS 3573, Managerial Communications
ECON 4333, Government Regulation of Business
ECON 4433, Managerial Economics

Logistics:

MKTG 3063, Transportation 3
MKTG 4113, International Marketing 3
Select three (3) semester hours from the following course list 3

MKTG 3093, Professional Selling and Sales Management
MKTG 4053, Electronic Marketing
MKTG 4093, Carrier Management
MKTG 4273, Transportation Internship
ACCT 4003, Managerial Accounting
BSYS 3573, Managerial Communications
MGMT 4123, International Management
ECON 4333, Government Regulation of Business
ECON 4433, Managerial Economics

Free Electives: Sem. Hrs.

19-16

Total 126

Minor in Marketing

Sem. Hrs.

ACCT 2023, Fundamental Accounting Concepts, OR 3
ACCT 2002, Principles of Accounting I 3
ECON 2323, Principles of Microeconomics, OR 3
ECON 2303, Economic Issues and Concepts 3
MKTG 3013, Marketing 3

SELECT THREE OF THE FOLLOWING:

MKTG 3033, Advertising and Promotion
MKTG 3043, Retailing
MKTG 3063, Transportation
MKTG 3093, Professional Selling and Sales Management
MKTG 4013, Service and Non-Profit Marketing
MKTG 4043, Consumer Behavior
MKTG 4053, Electronic Marketing
MKTG 4113, International Marketing
MKTG 4223, Marketing Management

Total 18

See the ASU web page (www.astate.edu) for current bulletin information.
COLLEGE OF BUSINESS COURSE DESCRIPTIONS

DEPARTMENT OF ACCOUNTING AND LAW

The university reserves the right to change course scheduling when circumstances dictate such changes.

Accounting (ACCT)

2003. Principles of Accounting I The accounting cycle for merchandising and service oriented business organizations. Primary emphasis is on accounting principles applicable to measuring assets, liabilities, owners’ equity and income. (F, S, SU)

2013. Principles of Accounting II Special measurement problems for partnerships and corporations. The course also covers basic accounting and reporting for manufacturing companies. A part of the course is devoted to special reports, and managerial uses of accounting data for the decision making function. Prerequisite: ACCT 2003 with a grade of "C" or better. (F, S, SU)

2023. Fundamental Accounting Concepts Primary emphasis will be in developing an understanding of the fundamental accounting concepts, with secondary emphasis on procedural mechanics. In addition, the student should develop an awareness of the language and environment of American business, an appreciation of accounting methodology, and skill in problem solving. (open only to students not majoring in the College of Business) (F, S)

3003. Intermediate Accounting I An in-depth study of accounting statements, the accounting process, inventory valuation procedures, operational assets, and investments. Prerequisite: ACCT 2013 with a grade of "C" or better. (F, S, SU)

3013. Intermediate Accounting II A detailed study of the corporate form of organization. In addition, effort is devoted to error corrections, analysis of financial statements, funds flow and cash flow reporting, and the controversial areas of accounting. Prerequisite: ACCT 3003 with a grade of "C" or better. (S, SU)

3023. Cost Accounting General principles of cost accounting, including the methods of collection, preparation, and interpretation of cost data for industrial and commercial concerns, comprehensive budgets, and standard costs. Prerequisite: ACCT 3013 with a grade of "C" or better. (F, SU)

3043. Cost Accounting II Continuation of Cost Accounting I. Includes decision models and cost information, cost allocation, systems choice and management control. Prerequisite: ACCT 3023. (S)

4003. Managerial Accounting Accounting principles and trends especially from the managerial viewpoint. Control of business activities through accounting: allocation of costs; financial statement analysis; concepts of costs, income, revenue, and equities, and their connection with accounting objectives. (not available to accounting majors) Prerequisite: ACCT 2013 with a grade of "C" or better. (S, SU)

4013. Tax Accounting I Examines the laws, rules, and procedures of federal income taxes for individuals. In addition, the business events and transactions which influence taxable income for individuals are studied. Prerequisite: ACCT 2013 with a grade of "C" or better. (F, S)

4023. Advanced Accounting and International Issues Advanced study of accounting concepts and problems in the areas of business combinations, partnerships, and international accounting. Prerequisite: ACCT 3013 with a grade of "C" or better. (F, S)

4033. Accounting Information Systems Study of the role, design, characteristics, and function of accounting information systems. Prerequisites: ACCT 3003, ACCT 3023 with a grade of "C" or better, and MIS 2023 or consent of instructor. (F, SU)

4053. Auditing I Standards and procedures, code of ethics, form of audit reports and statements, and the principles underlying the verification of data presented in financial reports. Prerequisites: ACCT 3013 with a grade of "C" or better and QM 2113. (F, SU)

4113. Tax Accounting II Continuation of Tax Accounting I. Emphasis in this course will be on federal income tax laws for partnerships, fiduciaries, and corporations. Prerequisite: ACCT 4013. (S)

4123. Government and Not-For-Profit Accounting Accounting principles and reporting standards as applied to governmental units and not-for-profit enterprises. Special emphasis will be placed on pronouncements of the Governmental Accounting Standards Board. Prerequisite: ACCT 3013 with a grade of "C" or better. (F, SU)

4143. International Accounting Introduction to international accounting issues including political, legal, and cultural influences; international accounting standards; foreign currency transactions; consolidated reporting for global firms; planning, control, and performance measurement systems; transfer prices and taxation. Prerequisite: ACCT 2013. (F)

4153. Fraud Examination A study of how any why occupational fraud is committed, how fraudulent conduct can be deterred, and how allegations of fraud should be investigated and resolved. Prerequisite: ACCT 2013. (S)

4301-2-3. Special Problems in Accounting Individual problems or topics in accounting arranged in consultation with the instructor. (Must be approved by department chair) (D)

4783. Internship in Accounting Provides practical financial, managerial, or not-for-profit experience through work in a meaningful capacity. Prerequisite: 12 hours of accounting above the principals level and approval of departmental chair. (F,S,SU)

Law (LAW)

2023. Legal Environment of Business Introduction to the fundamental elements of the Anglo-American legal system and its common law origins. The scope of the course will include the application and operation of the legal system in the remedy of business disputes, the development and operation of the court system, and the regulation of American business and industry by the United States government. (F, S)

Electives:

Sem. Hrs.

39

Total 126-137

See the ASU web page (www.astate.edu) for current bulletin information.
4033. **Law of Commercial Transactions** Business-related legal subject matter reflecting marketplace problems and considerations. Topics include the law of sales, secured transactions, commercial paper, contracts, and bankruptcy. Prerequisite: LAW 2023. (S)

4043. **Law of Business Organizations** Business-related legal subject matter reflecting marketplace problems and considerations. Topics include the law of corporations, partnerships, agencies, and property. Prerequisite: LAW 2023. (F)

4053. **Employment Law** Analysis of current employment law practices as applied to human resource management, with emphasis on federal and state civil rights laws. Prerequisites: LAW 2023 and MGMT 3123. (F)

**DEPARTMENT OF ECONOMICS AND FINANCE**

**Economics (ECON)**

2313. **Principles of Macroeconomics** National income accounting, inflation and unemployment, competing theories of national income, fiscal policy, the Federal Reserve system and monetary policy, and international trade. (F, S, SU)

2323. **Principles of Microeconomics** Principles of resource allocation, supply and demand, consumer behavior, costs of production, the competitive model, oligopoly, and factor markets. (F, S, SU)

2333. **Economic Issues and Concepts** Designed to give the student a basic understanding of our economic system. Basic economic concepts will be explored and contemporary economic problems and issues will be examined in light of the concepts learned. (F, S)

3313. **Microeconomic Analysis** Designed to develop an analytical framework for the study of the determination of relative prices and the allocation of resources in a market economy. The course will cover consumer choice and demand, resource utilization and the theory of the firm, competitive market equilibrium and resource allocation, and non-competitive market structures. Prerequisites: ECON 2313 and 2323. (S -odd)

3323. **Money and Banking** Monetary and banking history, with emphasis on the theory of money and banking in the United States, operations of commercial banks and the Federal Reserve System. Prerequisites: ECON 2313 and 2323. (F, S, SU)

3343. **Comparative Economic Systems** Comparative study of alternative economic systems. Emphasis is given to the institutions and principles which guide the use of scarce resources to want satisfaction. Particular attention is given to the operation of actual economic systems concerning the extent to which they are market directed or government directed. (S)

3353. **Macroeconomic Analysis** Explains economic theories as they relate to national policy making. Emphasis on causes of inflation and unemployment. Prerequisites: ECON 2313 and 2323. (S)

3363. **Labor Economics** The economics of labor markets; factors affecting the economy’s demand for labor and the decisions of workers to supply labor. Current labor market problems such as unemployment, unions, poverty and productivity will be analyzed. Prerequisites: ECON 2313 and 2323. (S -odd)

4103. **International Trade** Economic theory and history of international trade. Topics such as comparative advantage, the effect of protectionism and determination of exchange rates will be emphasized. Prerequisites: ECON 2313 and 2323. (This course can be counted as an Economics elective). (This course is cross-listed as IB 4103). (F, S, SU)

4313. **History of Economic Thought** Brief review of the doctrines of economic thinkers from early time through Marshall. Broader study of modern writers and theories. Prerequisites: ECON 2313 and 2323, or ECON 2333. (F)

4323. **Economic Policy Analysis** Deals with public revenues, the theory of taxation, institutions and problems of the revenue system as a whole, and the effects of the taxing, spending, lending, and borrowing by government units upon the national income and employment. Prerequisites: ECON 2313 and 2323, or ECON 2333. (SU -even)

4333. **Government Regulation of Business** Survey of theoretical treatments of oligopoly, natural monopoly, and market failures; review of antitrust statutes applicable to price-fixing, monopoly, mergers, vertical restraints, and price discrimination; social welfare tradeoffs associated with public regulation of electric, natural gas, cable TV, and telecommunications firms. Prerequisite: ECON 2313, 2323. (S -even)

4343. **Managerial Economics** Practice in the use of economic principles in solving business problems. Areas covered include uncertainty, forecasting, demand analysis, and capital management. Prerequisites: ECON 2313 and 2323, QM 2113 and 3523. (F, S, SU)

4353. **Economic Development** Primary concern is with theories and methods of economic development for developing countries. Agriculture, population, investment, natural resources, international relations and economic aid are the main topics of the course. Prerequisites: ECON 2313 and 2323. (F -odd)

4363. **Environmental Economics and Management** This course examines the impact of human activities on ecosystems and vice versa, as well as the use of markets to manage the environment. Topics include environmental services, ecotechnology, pollution control, valuation, economics of climate change and biotechnology. (F)

4681-2-3. **Special Problems in Economics** Individual problems in economics arranged in consultation with the instructor. (Must be approved by department chair). (F, S, SU)

**Economic Education (ECED)**

3513. **Economics for Teachers** Designed to give school teachers an overall view of the structure and operation of our economic system. Emphasis will be placed on preparing teachers to utilize economic concepts in analyzing current economic problems. (for Education majors only—no credit for business majors) (F, S, SU)

3553. **Economic Policy Analysis** Provides in-service teachers a means for developing a fundamental understanding of our total economic system: its processes, problems and potentialities. Teachers learn how to relate this understanding to current economic issues and policies. This workshop will satisfy the requirement for teacher certification. Open to in-service teachers, all grade levels. (SU)

4513. **Economic Education Workshop** Designed to give school teachers an overall view of the structure and operation of our economic system. Emphasis will be placed on preparing teachers to utilize economic concepts in analyzing current economic problems. (for Education majors only—no credit for business majors) (F, S, SU)

4523. **Special Issues and Methods in Economic Education** Detailed examination of selected contemporary economic issues appropriate for grades kindergarten through twelve. Prerequisites: ECON 4513 and/or instructor’s approval. (D)

**Finance (FIN)**

3713. **Business Finance** Legal forms of American business organization, policies, methods, and institutions involved in financing business. The principles of financial management will be studied with emphasis on the corporation, including cash flows, securities, financial structures, expansion, and acquisitions. Prerequisite: ACCT 2013 or 2023. (F, S, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
3733. **Personal Finance** Concerned with management of the personal financial resources of the individual and the family. Provides guidance for consumer purchasing and credit, personal insurance, taxation, investing, estate planning, and social security. (Designed for nonbusiness majors; course counts only as a free elective, except where required in major) (F, S, SU)

3763. **Financial Institutions and Markets** An in-depth study of financial institutions such as banks, savings and loans, insurance companies and financial markets. Primary emphasis will be on depository institutions. Prerequisite: FIN 3713 (F, S)

3773. **Financial Risk Management** An in-depth study of financial risks facing banks—such risks as those arising from fixed income and foreign exchange investments will be covered. (F)

3813. **International Financial Management and Banking** Study of financial concepts and issues in banking as they relate to business decisions in a global economy.

4723. **Investments** Security investment, the tools of investment analysis, the formulation of investment policy and the role of the individual investor in the economy. Prerequisite: FIN 3713. (F, S)

4743. **Managerial Finance** Emphasis on principles and tools for analysis and decision making in working capital management. Studies include cash flow forecasting, inventory model applications, sources and uses of funds analysis, trade credit policies, and techniques of short- and intermediate-term sales forecasting. Prerequisite: FIN 3713. (F, S)

4753. **Capital Management** Analysis of the management aspects relating to the inflows and outflows of permanent capital in business enterprises. Examines the management of long-term assets, long-term credit, equity and internal financing. Corporate expansion including mergers, acquisitions, corporate reorganization, and bankruptcies, Prerequisite: FIN 3713. (F, S)

4763. **Bank Management** Principles used in the management of commercial banks, relating to loans, credit analysis; security portfolios; analysis and interpretations of Federal Reserve regulations and publications. Prerequisite: FIN 3713. (F)

4783. **Internship in Bank Management** Supervised work experience with bank management in an appropriate banking environment. To earn intern credit, each student is expected to spend six to eight hours per week for 15 weeks or the equivalent at the bank. Prerequisites: Junior or Senior standing is required. (F, S, SU)

4991-2-3. **Special Problems in Finance** Individual problems in finance arranged in consultation with the instructor. (Must be approved by department chair) (F, S, SU)

**Quantitative Management (QM)**

2113. **Business Statistics** Statistical methods used in studying business and economic data; averages and dispersions, probability, sampling, statistical inference, estimation, tests of hypotheses, index numbers, linear regression and correlation. Prerequisite: MATH 1023 or MATH 2143 and student must have satisfied College of Business Computer Proficiency Requirement. (F, S, SU)

3113. **Quantitative Business Analysis** A computer-integrated analysis of descriptive and inferential business statistics with an emphasis on the application of statistical techniques and interpretation. Prerequisite: QM 2113 (D)

**Real Estate and Insurance (REI)**

3413. **Real Estate Practice** Introductory study of real estate business; basic principles of real property ownership, utilization, and transfer; mortgage financing; brokerage; management; valuation; and subdividing. (F, S)

3423. **Real Estate Brokerage and Management** Organization and conduct of real estate brokerage and managerial business and professional activities. Social, economic, legal, and ethical responsibilities of the real estate broker and real property manager. (D)

3433. **Abstracting and Platting Real Estate** Kinds of conveyances and encumbrances affecting the title to real estate. Methods used in proving title, including abstracting and title insurance. The process of platting using various types of legal descriptions. (F - even)

3513. **Risk and Insurance** Introductory study of the insurance business; risk theory, the insurance mechanism, fundamental legal principles and insurance contract analysis. Emphasis on the insurance needs of a typical American family. (F, S, SU)

4413. **Legal Aspects of Real Estate** Principal areas of real estate law including those applicable to real estate brokers within Arkansas. (D)

4423. **Real Estate Finance** Instruments, techniques, and institutions of real estate finance; sources of funds; mortgage risk analysis; emphasis on typical policies and procedures used in financing of residential, industrial, and commercial properties. (S)

4433. **Real Estate Appraising** Factors influencing real property values; application of three approaches in determining the value of residential, commercial, and industrial properties. (F)

4443. **Appraising and Investment Analysis of Income Property** Application of techniques used in analyzing potential return from income properties to arrive at investment decisions and estimates of real estate values. Prerequisite: REI 4433 or consent of instructor. (S - even)

4513. **Property and Liability Insurance** Analysis of risk theory, property and liability risks, and the economic functions of property insurance. The course treats traditional and modern theories of risk, property and liability coverages, and functional insurance areas. (S)

4543. **Life Insurance** Analysis of the economic functions of life insurance. Attention is centered on the human-life value concept and the basic forms of life insurance and annuities. Legal aspects, contractual provisions and health and other specialized forms of human life insurance are studied. (F)

4591-2-3. **Special Problems in Real Estate and Insurance** Individual problems in real estate and insurance arranged in consultation with the instructor. (Must be approved by department chair). (F, S, SU)

4601-2-3. **Internship in Real Estate and Insurance** Practical training in real estate or insurance within appropriate companies or agencies. To earn intern credit, each student will be expected to spend two hours with the firm per week per credit hour awarded. Prerequisites: REI 3413 (for real estate) or REI 3513 (for insurance) and approval of instructor. (These prerequisite courses permit an individual to hold a valid license to practice in each respective field after passing the proper licensing examination). Internship requires a Junior classification or above. (D)

**DEPARTMENT OF COMPUTER AND INFORMATION TECHNOLOGY**

**Management Information Systems (MIS)**

1503. **Microcomputer Applications** Study of the role of the microcomputer or PC as a tool used for business. The applications covered will include: Windows operating system, Internet access, E-mail operations, Excel spreadsheets, and Powerpoint presentations. (F, S, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
2033. **Visual BASIC Programming**  An introduction to Windows programming using Microsoft Visual BASIC. Students learn the concepts needed to write programs using event-driven, object-oriented methodology. Prerequisite: Completion of College of Business computer proficiency requirement. (F, S)

2203. **Structured Programming Using COBOL**  Business application programs will be written using the structured format of the COBOL language. Programming structured covered will include: sorting, control breaks, data validation, table processing, and screen design. (D)

2523. **Telecommunications & Networking Essentials**  This course will examine basic networking fundamentals. These include networking media, connectivity, devices, telecommunications protocols, and different networking models. (F, S, SU)

3013. **Management Information Systems**  Provides understanding of information needs of management, information technology used by various business subsystems, and how technology can be utilized for competitive advantage. (F, S, SU)

NOTE: MIS 3013 is a prerequisite or co-requisite for ALL upper-level MIS courses.

3273. **Modern Programming Languages**  Students will be required to solve typical business and industry problems. Both C++ console applications and Windows applications using Microsoft Foundation Classes will be introduced. Prerequisite: Successful completion of a programming course with a grade of "C" or better. (F)

3303. **Interactive Programming**  Explores the development of Windows based applications and programming to provide connectivity to web based resources is also included. Prerequisite: Previous programming language. (S)

3353. **Web Site Design and Development**  Basic design principles of building web pages, site management, and development for various browser environments. Includes HTML, style sheets, client-side and server-side scripting, and related technologies. Prerequisite: Previous programming language. (F)

3403. **Database Management**  Discusses enterprise-wide database theory and Structured Query Language (SQL) with the use of industry standard DBMS, ORACLE. Prerequisites: MIS 1503 or equivalent, MIS 3013. (F, S, SU)

3413. **Advanced Database Management**  Extends the coverage of MIS 3403 using a popular DBMS. Topics include client applications, object-oriented database development, and data security. Prerequisite: MIS 3403. (S)

3603. **Systems Analysis and Design**  Covers the basic techniques used in the analysis, design, and implementation of computer based information systems. Provides an understanding of the systems study, project evaluation, planning, and systems design. Prerequisite: Competency in a programming language or consent of instructor. (F, S, SU)

3623. **LAN Administration**  Covers topics pertinent to the administration of a local area network. Topics include: user management, file management, security, and network printing. Prerequisite: Computer literacy. (F, S, SU)

4053. **Information Resource Management**  Examines the integration of management information technology into the mainstream of business functions. Emphasis is placed on resource planning on an enterprise-wide scale. (S)

4093. **Special Problems in Information Systems**  Individual problems in MIS arranged on a case-by-case basis after consultation with the instructor. Students must meet departmental requirements before enrolling in this course. (F, S, SU)

4103. **Advanced LAN Administration**  Advanced networking administration issues are covered as they relate to local area networks. Students will be introduced to advanced client/server management topics necessary to administer a large complex network. Prerequisite: MIS 3623 or prior network experience. (S)

4453. **Technologies for E-Commerce**  Provides an understanding of the technologies behind E-commerce and how they enable the delivery of goods and services using electronic formats. (S)

4653. **Automatic Data Capture**  Methods, technologies, systems, and standards used in supply chain information systems and e-business for automatically identifying objects, and collecting and transferring data. Technologies such as bar coding, RFID, smart cards, magnetic striping, biometrics, GPS, real time locating, and voice data entry, as well as their business applications are addressed. (F)

4823. **LAN Design**  Students will be required to complete a complex network design for a model company. The design will include hardware/software installation, database design and replication, and implementation of various troubleshooting models. Prerequisite: MIS 3523 or MIS 3623 or prior network experience. (SU)

4881-6. **MIS Internship**  Provides practical information technology experience in an MIS setting. Students will be assigned to work with an outside organization to gain real-world training. Prerequisite: Permission of Department Chair and Internship Director required. (F, S, SU)

Quantitative Management (QM)

3523. **Operations Management**  Introduction to the operations function in manufacturing and services. Emphasis on continual improvement of systems for producing goods and services. Prerequisite: QM 2113. (F, S, SU)

4513. **Quality Control**  Statistical techniques in quality control. Topics for study include administration of inspection, tolerance systems, sampling inspection plans, control charts for variables, and control chart for defectives. Prerequisite: QM 2113. (D)

4613. **Production Management**  Advanced procedures, techniques, and their application to problems related to production management. Emphasis is also placed on the design of operations planning and control, quality control, inventory, maintenance, and product planning systems within the firm. Prerequisite: QM 3523. (S, D)

Business Technology (BSYS)

1523. **Keyboarding I**  Introduces the student to the computer keyboard for increased proficiency of entering data in the proper format. (F, S, SU)

2413. **Word Processing I**  Introduction to word processing concepts and applications. Prerequisite: Ability to type. (F, D)

2533. **Internet, Intranet and E-mail Applications for Business**  Students will develop technology skills and research strategies using the Internet, Intranet, and E-mail. Prerequisite: Basic Computer Competency. (F, S, D)

2543. **Keyboarding II**  Covers entry-level and advanced-level job simulations in legal, medical, technical, accounting, and other firms. Prerequisite: Keyboarding I or equivalent. (F, S, SU)

2583. **Spreadsheets for Managerial Decisions**  Theory and concepts of spreadsheets are introduced. Students receive instruction and practice in creating, formatting, and editing spreadsheets using personal computers. Prerequisite: MIS 1503 or consent of instructor. (F, S, D)

See the ASU web page (www.astate.edu) for current bulletin information.
3463. **Presentation Techniques** Introduces the student to various electronic means of presenting information of professional design and quality using presentation software. (S)

4391-2-3. **Special Problems in Business Systems** Individual problems in Business Systems arranged in consultation with the instructor; must be approved by the department chair.

4533. (4 503 3) **Word Processing II** Advanced word processing concepts and applications. Prerequisite: BSYS 2413 or consent of instructor. (S, D)

Business Education (BUED) (Special course fees may apply.)

4291-2-3. **Special Problems in Business Technology** Individual problems in Business Technology arranged in consultation with the instructor; must be approved by the department chair.

4503. **Business Technology Methods** The present status and requirements of office personnel, and the materials, facilities, and equipment needed. Special attention is given to instructional innovations including simulation, practice sets, and computer instruction. (F)

4513. **Directed Field Experience** Provides business technology teachers, under direct supervision, the opportunity to develop and/or refine vocational competencies in office occupation. (SU)

DEPARTMENT OF MANAGEMENT AND MARKETING

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Management (MGMT)

3123. **Principles of Management** Overview of foundational management principles, including internal and external assessment and planning; organization structure and design; leadership and motivation; and decision and control processes. (F, S, D)

3143. **Human Resource Management** Functions and problems involved in personnel management with emphasis placed upon recruitment, selection, management development, utilization of and accommodation to human resources by organizations. Prerequisite: MGMT 3153. (F, S, D)

3153. **Organizational Behavior** An interdisciplinary analysis of the relationships of individuals and groups within the context of the organization, blending concepts drawn from psychology, sociology, philosophy, and communication theory with basic managerial concepts. (F, S, SU)

3163. **Labor Relations and Collective Bargaining** Labor-management relations in both the public and private sectors, with emphasis on the process of managing within a union environment that involves contract negotiation, mediation, and arbitration. Prerequisite: MGMT 34143 (F, D)

3173. **Career Management** Recruiting, selection and placement organization of a firm. Involves in-depth analysis of occupational information resources, interview techniques, placement services, job search strategies, recruitment strategies and career advancement. Prerequisite: MGMT 3153. (D)

3183. **Entrepreneurship** Examines the nature of entrepreneurial activity, the basics of business plan development, new venture creation, and small business strategic planning. (F)

3193. **Social Impact Management** Examines the interdependence of business and society. Students will develop skills to manage social impacts and divergent stakeholder perspectives. (D)

3613. **Leadership** Leadership processes and application at the organization, group, and individual levels. Emphasis on team activities. Prerequisite: MGMT 3123 or MGMT 3153. Prerequisite: MGMT 3143. (S, D)

4123. **International Management** Systematic review of international environment forces and their influence on all management areas of the international firms: organizational structures, human resources, logistics, laws, and policy. Prerequisite: MGMT 3153. (F, S, D)

4143. **Organizational Change and Development** Application of planned organizational change and development with an emphasis on how change occurs in dynamic organizational cultures in contemporary business organizations. Prerequisite: MGMT 3153. (D)

4153. **Small Business Institute** Designed to give students experience in dealing with problems in a real business environment by giving them the opportunity to furnish management assistance counseling to members of the small business community. Particular emphasis is placed on identifying the firm’s resources, evaluating the firm’s objectives, identifying sensitive problem areas, and formulating an appropriate business plan. Students are expected to possess multi-disciplinary skills and be able to integrate these skills in the management assistance provided the small business client. Prerequisite: Written approval of SBI Director. (D)

4163. **Small Business Management** The application of management, marketing, and finance to small business. The course addresses practical aspects of planning and organization, marketing, human resources, and financial control. Prerequisites: MKTG 3013, ACCT 2003, ACCT 2013, and MGMT 3153. (D)

4173. **Compensation Management** Design and administration of compensation systems. Deals with determinants of general pay level, job evaluation, wage and salary survey, fringe benefit plans and the impact of current government regulations on pay structures. Prerequisite: MGMT 3143. (S, D)

4193. **Management Internship** Provides practical management experiences in personnel or industrial management. Senior students will be assigned to work with a regional firm, supervised by an experienced professional to gain real world training. Prerequisites: MGMT 3153 and consent of instructor. (F, S, SU)

4291-2-3. **Special Problems in Management** Individual problems in management arranged in consultation with the instructor. (Must be approved by department chair). (F, S, SU)

4393. **Management of Service Operations** Examines issues essential to the success of a service-oriented operation. Topics include: classification of services, service design and process selection, service, delivery system, capacity analysis, location, layout, automation, quality control, and scheduling. Heavy emphasis placed on case studies and analysis of real-world scenarios. (D)

See the ASU web page (www.astate.edu) for current bulletin information.
4013. Strategic Management  Designed to give students the opportunity to study administrative processes under conditions of uncertainty including an integrating analysis applied to all fields of business. Special emphasis is given to policy determination at the overall management level. Prerequisite: Senior standing, last semester, and completion of all other College of Business core requirements. Strategic Management may not be taken by correspondence. (F, S, SU)

Marketing (MKTG) (Special course fees may apply.)

1013. Introduction to Business  Survey course to acquaint beginning students with the major institutions and practices in the business world, to provide elementary concepts of business, and to serve as an orientation course for selection of a specific major. (Open to College of Business freshmen and non-business majors only). (F, S, D)

3013. Marketing  Business activities performed which direct the flow of goods and services from producer to consumer or user in order to satisfy customers and accomplish the company's objectives. Prerequisite: ECON 2323 or 2333. (F, S, SU)

3023. Applied Research  Systematic gathering, organizing, and analyzing data to provide managers with information they need to make better decisions. Emphasis is placed on the use of secondary data. Report writing and presentation are stressed. Prerequisite: QM 2113, BSYS 2563. (F, S, D)

3033. Advertising and Promotion  Advertising and other communication methods designed to present a company and its products or services to prospective customers. Prerequisite: MKTG 3013. (F, S, D)

3043. Retailing  Evaluation of the many elements in the dynamic retail field and a discussion of the responsibilities of retailing institutions, including management policies and operating methods. Prerequisite: MKTG 3013. (D)

3063. Transportation  Introduction to transportation systems with emphasis on the significance of transportation in the business and economic environment. The course is designed to familiarize students with a development of our transportation network, transportation prices, rate theory, and regulatory policies and procedures. Prerequisite: ECON 2323. (F, D)

3073. Product and Price Strategies  Quantitative basis of pricing and product management used to facilitate understanding of decision-making processes when developing and controlling a coordinated marketing strategy. Prerequisite: MKTG 3013. (F, S, D)

3093. Professional Selling and Sales Management  Introduction to the personal selling process, the functions of sales management, and current issues, legal and ethical issues, and the impact of technology as the topics relate to selling, the sales force, and sales management. Prerequisite: MKTG 3013. (D)

4013. Service and Non-Profit Marketing  Application of marketing to service and non-profit industries. Emphasizes the peculiar nature of services and non-profit marketing when developing marketing strategies. Prerequisite: MKTG 3013. (D)

4033. Consumer Behavior  Evaluation of the extensive body of research evidence pertaining to the consumer, and an assessment of the marketing implications of the various processes and facets of consumer motivation. (D)

4053. Electronic Marketing  The course is designed to introduce and expand students' knowledge and usage of electronic resources for application in the marketing process. Prerequisite: MKTG 3013. (D)

4063. Supply Chain Management  Aspects of moving raw materials and finished goods through the firm's networks of warehousing, inventory control, materials management, and order processing. The student will examine trade-off possibilities and management alternatives to minimize cost of production flow and to maximize customer service. Prerequisite: MKTG 3013. (F, S, D)

4083. Marketing Research Design and Analysis  Processes involved in gathering, recording, and analyzing all facts about problems relating to the transfer and sale of goods and services from producer to consumer. Prerequisites: MKTG 3013 and MKTG 3023. (F, S, D)

4093. Carrier Management  Investigation of the transportation industry from the carrier perspective. Deals with analysis of carrier operations problems including traffic flow, transportation services marketing, equipment selection and control, fleet management, claims management, and dispatching procedures. Prerequisite: MKTG 3063. (S, D)

4113. International Marketing  Exporting and importing products, as well as the management of international operations. These include all phases of business activity related to operating marketing and sales facilities abroad, establishing production or assembly facilities in foreign areas, and creating licensing arrangements. Prerequisite: MKTG 3013. (F, D)

4191-2-3. Special Problems in Marketing  Individual problems in marketing arranged in consultation with the instructor. (Must be approved by the department chair). (F, S, SU)

4223. Marketing Management  Combines team effort and critical analysis of marketing strategies in a competitive situation. The study includes the planning and implementation of product, price, distribution, and promotion strategies as well as continual assessment and adjustment of such strategies in a simulated environment. Prerequisite: MKTG 3013. (D)

4273. Transportation Internship  Provides practical transportation experience in business. Senior students will be assigned to work with regional firms and be supervised by an experienced professional. Prerequisites: MKTG 3063 and consent of instructor. (F, S)

4283. Marketing Internship  Provides practical marketing experience in merchandising or transportation. Senior students will be assigned to work with regional firms, supervised by an experienced professional to gain real world training. Prerequisites: MKTG 3013 and consent of instructor. (F, S, SU)

431V. Health Care Marketing  The course explores a variety of environmental factors which affect the delivery of health services at all levels and discusses marketing approaches/techniques to best meet the needs of the community served. Prerequisite: MKTG 3013. (D)

432V. Customer Relationship Management  This course focuses on the broad spectrum of CRM and concentrates on concepts and practices related to building and maintaining customer loyalty and lost customer winback. Prerequisite: MKTG 3013. (D)

Business Education (BUED) (Special course fees may apply.)

4291-2-3. Special Problems in Business Technology  Individual problems in Business Technology arranged in consultation with the instructor; must be approved by the department chair.

4503. Business Technology Methods  The present status and requirements of office personnel, and the materials, facilities, and equipment needed. Special attention is given to instructional innovations including simulation, practice sets, and computer instruction. (F)
4513. **Directed Field Experience** Provides business technology teachers, under direct supervision, the opportunity to develop and/or refine vocational competencies in office occupation. (SU).

**Brand management** Through the use of computer simulation, students will analyze information, apply marketing principles, and make strategic brand decisions. Collaborating within a competitive environment, students must synthesize marketing information to make effective decisions for the simulated brand. Prerequisite: MKTG 3013. (D)

3533. **Integrated Software** Instructs students in the use of the microcomputer, voice processor, and various other electronic equipment used in the business environment. Prerequisite: ability to keyboard. (F, S)

3573. **Managerial Communications** Advanced business communication course to develop business reports and presentations and to investigate technological business communication systems. Prerequisite: BSYS 2563. (F, S, D)

434V. **Sports Marketing** The application of marketing principles and activities such as research, segmentation, product development, pricing, event marketing, sponsorship, consumer behavior, licensing, branding, advertising, and sales promotion tactics will be analyzed in the context of effective sports marketing. Prerequisite: MKTG 3013. (D)

435V. **Internet Marketing** The application of electronic resources to the marketing process. The course will familiarize students with electronic resources and the use of the Internet in the marketing process. Prerequisite: MKTG 3013. (D)

436V. **Direct Marketing** This course introduces students to the basic principles and practice of direct marketing. Topics will include the history and development of direct marketing; the industry players and what they do; organizations and products that use direct marketing in their marketing mix; and the use of databases in direct marketing. Prerequisite: MKTG 3013. (D)

**International Business (IB)**

3813. **International Financial Management and Banking** Study of financial concepts and issues in banking as they relate to business decisions in a global economy. (This course is cross listed as FIN 3813.) (SU -odd)

4103. **International Trade** Economic theory and history of international trade. Topics such as comparative advantage, the effect of protectionism and determination of exchange rates will be emphasized. Prerequisites: ECON 2313 and 2323. (This course can be counted as an Economics elective). (This course is cross-listed as ECON 4103). (F, S, SU)

4133. **International Law** Law relevant to transactions conducted in international markets. Covered topics include the concept, the sources, the force and effect, and the history and scope of international law. Prerequisite: BUAD 2023. (This course can be counted as a BUAD elective.) (D)

4273. **Special Problems** Independent research study dealing with the socio-economic, political, and cultural environment of an area or foreign country. The study may also deal with the production, marketing, promotion, and pricing of a product abroad and with the management aspects of a multinational business. (F, S, SU)

4283. **Internship in International Business Studies** Supervised work experience with a firm in a foreign country, the international division of a firm in the United States, an international institution, or a government agency dealing with international business or foreign relations. Provides a practical experience for international business students. Prerequisite: junior or senior classification and consent of instructor. (D)

**Business Systems (BSYS) (Special course fees may apply.)**

2563. **Business Communications** Theories and principles of written, interpersonal, and oral communication. Prerequisite: ENG 1013 (F, S, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
College of Communications

Professor Russell E. Shain, Dean

The College of Communications offers students the opportunity to combine the best of a broad education in the liberal arts and sciences with the professional preparation required in the wide variety of fields in communications. The college has three departments: Journalism and Printing; Radio-Television; and Speech Communication. The college is accredited by the Accrediting Council on Education in Journalism and Mass Communications.

Studies in the college allow students to learn to gather, organize, synthesize and communicate information professionally in a democratic, multi-cultural society. They learn to think critically and communicate effectively in preparation for productive roles, for example, in news, radio, television, cable, public relations, organizational communication, advertising, photojournalism, printing, web and multimedia production and design or health communication. Students also find communications courses excellent preparation for graduate work and the study of law.

In addition to meeting the general requirements for all baccalaureate degrees, candidates for a bachelor of science in Radio-Television or Journalism must complete 125 hours. Students pursuing degrees in radio-televison and journalism are required to have a minor outside their two departments. The minor must be approved by the student’s adviser. Students pursuing a bachelor of arts in Speech Communication or a bachelor of science in Printing must complete 124 hours.

To assure that students earning the bachelor of science degree in journalism or radio-televison acquire the broad education needed by a mass communications professional, the college requires that 80 semester hours of a student’s degree program be completed outside the Departments of Radio-Television and Journalism and Printing. At least 65 of the 80 hours must be in courses approved as "liberal arts and sciences." A list of approved courses is available at department offices.

The College of Communications offers students opportunities to apply what they learn in a variety of national student organizations, including: The Herald, ASU-TV, the Forensics team, American Advertising Federation, Society of Professional Journalists, National Broadcasting Society, National Press Photographers Association, Gamma Tau Epsilon (printing), Public Relations Student Society of America, the Association of Women in Communications, the Undergraduate Student Research Association, and three honorary groups: Kappa Tau Alpha (journalism and mass communications), Pi Kappa Delta (forensics), and Lambda Pi Eta (communication).

Department of Journalism and Printing

Associate Professor Joel Gambill, Chair; Professors Fowler, Shipman; Associate Professors Fears, Zibluk; Assistant Professor Li; Instructors Hill, Mishra, Moskal, Thrasher

Programs in journalism (with emphases in news-editorial, public relations, advertising, and photojournalism) and printing management are administered under the Department of Journalism and Printing.

The professional program in journalism provides the opportunity for individuals to prepare for productive roles in news-editorial journalism, public relations, advertising, or photojournalism. The program strives to provide realistic instruction in modern journalistic techniques, promote a rich background in the liberal arts and sciences, and present current communications problems and trends in the context of their origin and development.

The purpose of the printing program is to educate individuals for management-level positions in the graphic arts industry.

See the ASU web page (www.astate.edu) for current bulletin information.
## Major in Journalism
### Bachelor of Science

### General Education Requirements:
- **Sem. Hrs.** 46-49

### Major Requirements:

#### News-Editorial Journalism
- JOUR 3003, Feature and Magazine Article Writing ........................................... 3
- JOUR 3043, Photography ....................................................................................... 3
- JOUR 3063, News Design ...................................................................................... 3
- JOUR 3073, News Design ...................................................................................... 3
- JOUR 3083, History of the Mass Media ................................................................ 3
- JOUR 4053, Public Affairs Reporting ................................................................. 3
- Additional hours in the Departments of Journalism and Printing and Radio-Television 9-15
- Minor in the liberal arts and sciences; must be approved by adviser .................. 18-24

**Total** 45-57

#### Public Relations
- PR 3003, Principles of Public Relations ............................................................. 3
- PR 3013, Public Relations Tools and Techniques ............................................... 3
- JOUR 3063, News Design ...................................................................................... 3
- PR 4013, Practicum in Public Relations ............................................................. 3
- PR 4023, Public Relations Case Studies and Campaigns ................................ 3
- Additional hours in the Departments of Journalism and Printing and Radio-Television 6-12
- Minor; outside the College of Communications (must be approved by adviser) 18-24

**Total** 45-57

#### Advertising
- ECON 2313, Principles of Macroeconomics* ..................................................... 3
- ECON 3233, Principles of Microeconomics* ...................................................... 3
- MKTG 3013, Marketing ....................................................................................... 3
- JOUR 3023, Principles of Advertising ................................................................ 3
- JOUR 3033, Advertising Copywriting ............................................................... 3
- JOUR 3063, Communications Research ............................................................ 3
- JOUR 3073, Desktop Publishing ........................................................................ 3
- RTV 3333, RTV Advertising and Sales ............................................................. 3
- JOUR 4003, Media Planning .............................................................................. 3
- JOUR 4033, Advertising Case Studies and Campaigns .................................. 3
- Additional hours in the College of Communications ........................................ 6-12
- Minor; outside the College of Communications (must be approved by adviser) 18-24

**Total** 54-66

*Economics and marketing courses taken to meet general education or minor requirements cannot be used to meet requirements of the advertising emphasis area. When encountering such a conflict, the student may substitute approved hours in the liberal arts and sciences for major requirements.

#### Photожournalism
- JOUR 3043, Photography ....................................................................................... 3
- JOUR 3063, News Editing ..................................................................................... 3
- JOUR 3073, News Design ..................................................................................... 3
- JOUR 3083, History of the Mass Media ................................................................ 3
- JOUR 3093, Photomarketing ............................................................................... 3
- JOUR 4013, Advanced Photomarketing ............................................................. 3
- JOUR 3003, Feature and Magazine Article Writing OR JOUR 4053, Public Affairs Reporting .................................................. 3
- PRIN 1813, Introduction to Digital Publishing .................................................... 3

**Total** 146

See the ASU web page (www.astate.edu) for current bulletin information.

## Major in Printing Management
### Bachelor of Science

### General Education Requirements:
- **Sem. Hrs.** 46-49

### Major Requirements:
- PRIN 1613, Graphic Communication Systems ............................................... 3
- PRIN 1813, Introduction to Digital Publishing .................................................... 3
- PRIN 2973, Prepress Workflows ....................................................................... 3
- PRIN 2953, Image Conversion ........................................................................... 3
- PRIN 3001, Printing Internship ........................................................................... 1
- PRIN 3004, Lithographic Technologies ............................................................. 4
- PR 3661, Practicum in Printing ........................................................................... 1
- PRIN 3693, Gravure, Flexographic and Screen Printing Technologies 3
- PRIN 4613, Post-Press Technologies .................................................................. 3
- PRIN 4623, Estimating ........................................................................................ 3
- PRIN 4643, Graphic Communications Management Seminar ......................... 3
- PRIN 4683, Management of Publications Production* .................................... 3
- PRIN 4703, Quality Management in Graphic Communications ....................... 3
- PRIN 4783, Electronic Innovations in Graphic Communications ...................... 3

**Total** 38

#### Additional Course Requirements:
- ACCT 2033, Fundamental Accounting Concepts .............................................. 3
- MIS 3523, Data Communications and Telecommunications for Business .......... 3
- MIS 1503, Microcomputer Applications ............................................................ 3
- ECON 2323, Principles of Microeconomics OR ECON 2333, Economic Issues and Concepts .............................................. 3
- SCOM 1203, Oral Communications ................................................................... 3
- RTV 4663, Multimedia Production Techniques ................................................ 3
- MGMT 3123, Organizational Management ...................................................... 3
- MGMT 3153, Organizational Behavior .............................................................. 3

**Total** 24

### Electives:
- **Sem. Hrs.** 13-16

(9 hours must be from the Liberal Arts & Sciences area)

**Total** 124

See the ASU web page (www.astate.edu) for current bulletin information.
Minor in Journalism

Sem. Hrs.

JOUR 2003, News Writing .................................................. 3
Lower level journalism elective .............................................. 3
12 hours upper level journalism or public relations courses ........................................................................... 12

Total 18

Minor in Printing

Sem. Hrs.

PRIN 1613, Graphic Communications Systems .................................................. 3
PRIN 2653, Image Conversion ........................................................................... 3
12 hours of upper level PRIN courses ........................................................................... 12

Total 18

Department of Radio-Television

Assistant Professor Richard Carvell, Chair; Professors Amienyi, Jackson-Pitts; Instructors Doyle, Franklin, Pillow, Roberts, Rogers, Zeng.

The program in radio and television offers emphases in broadcast news, management and production, which has options in video/audio or new media. The program is designed to provide the practical and theoretical knowledge necessary for those who would pursue careers in the broadcast, cable, digital/interactive media and related industries and for those who plan graduate work in communications.

Major in Radio-Television

Bachelor of Science

General Education Requirements:

Sem. Hrs.

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .................................................. 46-49

College Core Requirements:

Sem. Hrs.

RTV 1003, Mass Communications in Modern Society .................................................. 3
RTV 2003, News Writing ............................................................................ 3
RTV 4073, Communications Law & Ethics ........................................................................... 3

Total 9

Department Core Requirements:

Sem. Hrs.

RTV 2023, Audio Production ........................................................................... 3
RTV 3023, Video Production ........................................................................... 3
RTV 3033, Video Post Production ........................................................................... 3
RTV 3363, Communications Research ........................................................................... 3
RTV 4313, Electronic Media Management ........................................................................... 3

15

Emphasis Area: (select one of the three emphases)

Broadcast News

Sem. Hrs.

RTV 3003, Reporting for the Electronic Media ........................................................................... 3
RTV 4053, Public Affairs Reporting for Electronic Journalism ........................................................................... 3
RTV 4323, News Production and Performance ........................................................................... 3
Electives in Departments of Radio-Television and Journalism and Printing ———— 6-12
Minor in the liberal arts and sciences; must be approved by adviser .................................................. 18-24

Total 33-45

Management

Sem. Hrs.

RTV 3013, Writing for the Electronic Media .................................................. 3
RTV 3343, Advanced Radio Practices ........................................................................... 3
RTV 4303, Corporate Media Production ........................................................................... 3
Electives in Departments of Radio-Television and Journalism and Printing ———— 6-12
Minor in the College of Business; must be approved by adviser .................................................. 18-24

33-45

Production—Video/Audio Option

Sem. Hrs.

RTV 3013, Writing for the Electronic Media .................................................. 3
RTV 3343, Advanced Radio Practices ........................................................................... 3
RTV 4303, Corporate Media Production ........................................................................... 3
Electives in Departments of Radio-Television and Journalism and Printing ———— 6-12
Minor outside the College of Communications (must be approved by adviser) .................................................. 18-24

33-45

Production—New Media Option

Sem. Hrs.

RTV 3013, Writing for the Electronic Media .................................................. 3
RTV 4363, Multimedia Production Techniques ........................................................................... 3
RTV 4373, Internet Communications ........................................................................... 3
Electives in Departments of Radio-Television and Journalism and Printing ———— 6-12
Minor outside the College of Communications (must be approved by adviser) .................................................. 18-24

33-45

Electives:

Sem. Hrs.

(Number of hours determined by emphasis area and minor selected) .................................................. 125

Total 125

NOTES: 1. Areas within the liberal arts and sciences include art history, biology, botany, chemistry, computer science, economics, English, entomology, French, geography, geology, German, history, mathematics, music history and literature, philosophy, political science, physics, psychology, sociology, Spanish, theatre and film history and appreciation, zoology.

2. No more than three hours of internship credit may be counted within the 125 hours required for graduation.

Minor in Radio-Television

Sem. Hrs.

RTV 2003, News Writing ........................................................................... 3
RTV 2023, Audio Production ........................................................................... 3
RTV 3323, TV Workshop for Non-Majors ........................................................................... 3
Upper level Radio-Television electives ........................................................................... 9

Total 18

Department of Speech Communication

Associate Professor Dennis White, Chair; Professor Baglan; Assistant Professors Clark, Hayes; Instructor Harper

The Department of Speech Communication offers work leading to a Bachelor of Arts in speech communication or to a Bachelor of Science in Education in speech communication and theatre (offered jointly with the Department of Theatre). The department emphasizes oral communication as an essential process in society, as a means of personal expression and development, and as a major means in which students adjust to their society. The department provides courses that stress the theoretical and functional aspects of oral communication.

See the ASU web page (www.astate.edu) for current bulletin information.
The department offers practical experience through a nationally ranked forensics and debate program, a student community outreach program, and a college forensics tournament. Through judicious selection of electives, both within the department and outside, majors may prepare themselves for a wide range of careers. Students pursue programs to (1) provide the foundation for graduate work, with college teaching and research as an ultimate goal; (2) prepare for careers in community, educational, government, medical and industrial communication; (3) provide foundations for post-graduate study in law or theology; and (4) provide a traditional education in the liberal arts.

### Major in Speech Communication Bachelor of Arts

<table>
<thead>
<tr>
<th>General Education Requirements:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Requirements:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOM 1203, Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 2203, Introduction to Human Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 1211, Forensic Activities I</td>
<td>1</td>
</tr>
<tr>
<td>SCOM 2243, Principles of Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 3243, Principles of Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 3363, Human Communication Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 3523, Principles of Listening</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4203, Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4243, Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4253, Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4263, Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>Upper Division Speech Communication Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language-Quantitative Block Option:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech communication majors have an option of either:</td>
<td></td>
</tr>
<tr>
<td>A. Foreign Language (Two years of a high school foreign language may be used to waive six semester hours of this requirement)</td>
<td>12</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>B. Quantitative Block</td>
<td>12</td>
</tr>
<tr>
<td>ADM 2413, Introduction to Word/Information Processing</td>
<td></td>
</tr>
<tr>
<td>MATH 2144, Mathematics with Applications in Business and Economics</td>
<td></td>
</tr>
<tr>
<td>MG 2103, Business Statistics I</td>
<td></td>
</tr>
<tr>
<td>MIS 2523, Introduction to Information Management Systems</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor must be approved by adviser and shall not include courses taken to fulfill General Education requirements</td>
<td>18-24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-14</td>
<td></td>
</tr>
</tbody>
</table>

Total: 124

---

### Major in Speech Communication and Theatre Arts Bachelor of Science in Education

<table>
<thead>
<tr>
<th>General Education Requirements:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

| Specific General Education Requirements: | |
|------------------------------------------| |
| Students with this major must take the following: | |
| MUS 2503, Fine Arts/Music | |
| ART 2503, Fine Arts/Visual | |
| PSY 2013, Introduction to Psychology | |
| HIST 2763, The United States To 1876, OR | |
| POVM 2106, Introduction to United States Government | |

<table>
<thead>
<tr>
<th>Major Requirements:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOM 1203, Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 2203, Introduction to Human Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 1211, Forensic Activities I</td>
<td>1</td>
</tr>
<tr>
<td>SCOM 2243, Principles of Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 3243, Principles of Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 3363, Human Communication Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 3523, Principles of Listening</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4203, Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4243, Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4253, Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4263, Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>Upper Division Speech Communication Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Education Requirements:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>* PSY 3703, Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>** SCED 3514, Performance Based Instruction</td>
<td>5</td>
</tr>
<tr>
<td>** EDSP 4453, Methods and Materials in Teaching Speech Communication and Theatre in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>** SCED 4713, Educational Measurement With Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>** STSP 4826, Student Teaching in the Secondary School</td>
<td>12</td>
</tr>
<tr>
<td>** SE 3643, The Exceptional Student in the Regular Classroom</td>
<td>3</td>
</tr>
<tr>
<td>* See Bachelor of Science in Education degree-College of Education</td>
<td></td>
</tr>
<tr>
<td>** Prerequisite: Admission into the Teacher Education Program</td>
<td>33</td>
</tr>
</tbody>
</table>

### Graduation Requirement

All teacher education candidates (BSE) must take and pass the appropriate Praxis II Senior Exam for Drama/Speech and report their results to the Office of the Chair, Speech Communication, prior to graduation. Additionally, teacher education students must have a minimum overall GPA of 2.50 to be eligible.

### Additional General Requirements for Teacher Education:

<table>
<thead>
<tr>
<th>Additional General Requirements for Teacher Education:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 2513, Principles of Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>PE Activity Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

Total: 4

<table>
<thead>
<tr>
<th>Electives:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total: 127

---

### Minor in Speech Communication

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOM 1203, Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 2203, Introduction to Human Communication</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 1211, Forensic Activities I</td>
<td>1</td>
</tr>
<tr>
<td>SCOM 2243, Principles of Argumentation</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 3243, Principles of Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4203, Small Group Communication OR</td>
<td></td>
</tr>
<tr>
<td>SCOM 4243, Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>Upper Division Speech Communication Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

Total: 6

---

See the ASU web page (www.astate.edu) for current bulletin information.
DEPARTMENT OF JOURNALISM AND PRINTING

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The University reserves the right to change course scheduling when circumstances dictate such changes.

Journalism (JOUR)

1003. Mass Communications in Modern Society Survey of the varied fields of mass communications, with emphasis on their functions, operations, and problems in a democracy. (Also listed as RTV 1003.) (F, S, SU)

2003. News Writing Basic news writing for print, broadcast and Internet. Course includes attention to news style and grammar. Word processing skills required. Prerequisite: "C" or better in ENG 1003. (Also listed as RTV 2003) (F, S, SU)

2013. News Reporting Techniques of news gathering, with practical ex-perience in interviewing and writing for publication. Requires three hours of laboratory work per week. Prerequisite: C or better in JOUR 2003. (F, S)

301. Contemporary Events and the Mass Media Weekly review of news events and the mass media's coverage of them. (F, S)

303. Feature and Magazine Article Writing Methods of gathering material for feature stories through interviews, research, and observation; practice in writing the article. Requires three hours of laboratory work per week. Prerequisite: JOUR 2013. (F)

302. Principles of Advertising Advertising history, theory and practice, including traditional and non-traditional media. (S)

303. Advertising Copywriting Principles and practices of writing mass media advertising. Prerequisites: JOUR 2003 and JOUR 3023. (S)

304. Photography Elements of composition, camera, darkroom techniques and digital photography. Requires three hours of laboratory work per week. (Lab fee: $10). (Special course fee: $10.00) (F, S, SU)

305. Advanced Photography Lab Individual photography projects. Requires three hours of laboratory work per week. Prerequisite: JOUR 3043, consent of instructor and project proposal. (Special course fee: $15.00) (F, S)

306. News Editing Copyediting, rewriting news stories, writing headlines, with use of personal computer. Prerequisite: JOUR 2013. (F, S)

307. News Design Principles of visual communication; digital and print media design, and practice. Prerequisite: JOUR 2013. (S)

308. History of the Mass Media History of the mass media (newspapers, magazines, radio, television and new technology) from colonial days to the present. (S)

309. Photojournalism Practical experience with digital photography and layout for print media; use of image editing software, color theory, scanning input and output devices. Students required to submit projects for student publications and cover news events. Requires three hours of laboratory work per week. Prerequisites: JOUR 2003 and JOUR 3043 or consent of instructor. (Special course fee: $10.00) (S)

3363. Communications Research Study and use of research tools and theories available for mass communications problem solving. Emphasis will be on library research, theory approaches, and applied research as applied to the media. (S)

3673. Desktop Publishing and Publication Design Tools of electronic publishing and publication design are reviewed using desktop publishing software packages and computers. (F, S, SU)

4003. Media Planning This course covers the strategic and creative selection of media vehicles, scheduling of media messages, and purchase of media time and space to achieve advertising campaign objectives. (F)

4013. Advanced Photojournalism Digital photojournalism with emphasis on ethics and role of photojournalist in society. Students are expected to prepare a portfolio of work upon completion of the course. Six hours of laboratory work per week. Prerequisite: JOUR 3093. (Special course fee: $25.00) . (F)

4033. Advertising Case Studies and Campaigns Study of recent advertising cases and campaigns involving business, industry, institutions, and government. Students create a comprehensive advertising campaign for a given client. Prerequisite: JOUR 3033 and JOUR 3363. (S)

4043. Studies in Newspaper Management Study of business and editorial management of the print media, including newspaper organization, publishing policies and economics, print media technology, circulation and promotional problems. (F -even)

4053. Public Affairs Reporting Instruction and practice in gathering material and writing stories on public affairs; emphasis on courts and government. Requires three hours of laboratory work per week. Prerequisite: C or better in JOUR 2013 or consent of instructor. (S)

4063. Internship Supervised work for a newspaper or other suitable publication. Prerequisite: consent of the department chair. (SU)

4073. Communications Law and Ethics Legal and ethical limitations and privileges affecting the mass media. (Also listed as RTV 4073) (F, S, SU)

4083. Sports, Business and Opinion Writing Techniques of newswriting and information gathering in business and sports reporting. Techniques of opinion writing. Prerequisite: C or better in JOUR 2013 or consent of instructor or department chair. (S -odd)

4113. Integrated Communications Strategies Focuses on the strategic integration of various channels and methods of communications for the purpose of delivering key messages to diverse target audiences in order to elicit specific responses, create a dialogue and engender relationship-building. Prerequisite: JOUR 3023, PR 3003, or MKTG 3013. (S)

4323. Race, Gender and Media Survey of the interface between Americans of color, women and the mass media in the United States.

4373. Internet Communications Internet Communications provides students with a thorough understanding and practice in the use of the Information Superhighway. The course will also look at new opportunities for communications professionals. Prerequisite: Basic computer competency. (F)

4881-2. Special Problems in Journalism Prerequisite: approval of department chair and faculty. (F, S, SU)
Printing (PRIN)  (Special course fees may apply.)

1613. Graphic Communication Systems  An exploration of the industrial materials and processes utilized for graphic preparation and reproduction including lithography, gravure, flexography, screen printing, and non-impact printing processes. Classroom, industrial visitation and laboratory format. (F, S)

1813. Introduction to Digital Publishing  Theory and practice in digital publishing with emphasis in acquiring digital text and images while using current software to prepare the required files and digital documents for publishing to a newspaper printing press, the World Wide Web, individual CDs, digital color proofs, and other current media. (F)

2653. Image Conversion  Traditional line and halftone photography will be covered along with digital scanning, digital halftones, image processing software, and imagesetting technology. Classroom, industrial visitation and laboratory format (Prerequisite: PRIN 1613). (S)

2673. Prepress Workflows  Comprehensive overview of the major pre-publishing workflow elements and the options for their inter-relationships. (F)

3001. Printing Internship  Supervised learning experience in a professional printing business. Students will be required to work and study in an approved position. (Prerequisite: PRIN 1613, and consent of department chair and printing faculty). (F, S, SU)

3604. Lithographic Technologies  A study of practices in the lithographic platemaking, sheet fed press systems, web fed press reproduction variables, and quality control. Classroom, industrial visitation and laboratory format (Prerequisite: PRIN 2623). (F)

3661. Practicum in Printing  Supervised learning experience in the Arkansas State University Printing Services facility. Students will be required to work and study to gain professional, business, and industrial experiences (Prerequisite: PRIN 1613, consent of department chair and printing faculty). (F, S, SU)

3663. Gravure, Flexographic, and Screen Printing Technologies  An exploration of the gravure, flexographic, and screen printing processes of graphic reproduction. Critical aspects unique to each process will be studied. Each process will be studied through classroom experiences, industrial visitations, and laboratory format (Prerequisite: PRIN 1613). (F -odd)

4613. Post Press Technologies  Study of functions occurring after the material has been imaged, including case, mechanical and perfect binding and finishing operations. Additional components include web finishing, selective binding, ink jet imaging, and postal regulations and distribution (Prerequisite: PRIN 1613). (S)

4623. Estimating  Focus on establishing cost centers and budgeted hourly rates, estimating and pricing materials and buyouts, and analyzing and communicating production schemes for graphic reproduction (Prerequisites: PRIN 3604 and 3803). (S)

4643. Graphic Communications Management Seminar  Management issues specific to the graphic communications industry including quality assurance, sales and customer relations, marketing, scheduling production, laws, ethics, and government interface. Lecture based on course with industry visitations (Prerequisites: PRIN 3604 and PRIN 3001 or PRIN 3803). (F -even)

4683. Management of Publications Production  Opportunity for students to plan production, determine related costs, coordinate and perform production, control quality and develop a portfolio of a complete production experience. Lecture, industry visitations and laboratory format (Prerequisites: PRIN 1613 and PRIN 3803). (F)

4703. Quality Management in Graphic Communications  Quality issues specific to the graphic communications industry. (F)

4783. Electronic Innovations in Graphic Communications  Course designed to cover the concepts of digital imagery and output, on-demand printing, pagination, multimedia production, data bases, interactive design, electronic sales and customer relations. Classroom, laboratory and industry visitation experiences (Prerequisites: PRIN 1813, RTV 4363 and permission of instructor). (F -odd)

4881-2. Special Problems in Printing  Designed to provide individually directed research in some special area of printing for seniors. Should be arranged in consultation with a professor in the specified field of interest prior to the semester of study and approved by the department chair. A written paper is required. (F, S, SU)

Public Relations (PR)

3003. Principles of Public Relations  Nature and theoretical foundation of public relations; its role in society; practitioners and dynamics of the process. (F, S, SU)

3013. Public Relations Tools and Techniques  Analysis and application of public relations tools and techniques with an emphasis on public relations writing, specialized publications, and strategy for working with corporate and non-corporate organizations. Prerequisite: JOUR 2003 and PR 3003. (F, S)

4023. Public Opinion, Propaganda and the Mass Media  Survey of public opinion formation and change, with special attention to the role of the mass media in the creation and use of public opinion and propaganda. (F)

4033. Public Relations Case Studies and Campaigns  Study of recent public relations cases and campaigns involving business, industry, institutions, and government. Students create a comprehensive public relations campaign for a given client. Prerequisites: JOUR 3363 and 3013. (S)

4603. Crisis Communication  An investigation of communications during crises, focusing on public relations, advertising and other persuasive efforts by institutions, corporations, movement leaders, and citizens to describe, persuade and shape human interactions with their environment during a crisis. (F)

(Special Fees: Photography—$10; Advanced Photography Lab—$15; Photojournalism—$20)

DEPARTMENT OF RADIO-TELEVISION

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Radio-Television (RTV)  (Special course fees may apply.)

1003. Mass Communications in Modern Society  Survey of the various fields of mass communications, with emphasis on their functions, operations, and problems in a democracy. (Also listed as JOUR 1003) (F, S, SU)

2003. News Writing  Basic news writing for print, broadcast, and Internet. Course includes attention to news style and grammar. Prerequisite: "C" or better in ENG 1003. Word processing skills required. Prerequisite: "C" or better in ENG 1003. (Also listed as JOUR 2003) (F, S, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
2023. Audio Production  Foundations of sound, audio theory, and audio equipment; planning audio aspects of radio and television broadcasts and Webcasts; analog and digital recording; editing and post-production techniques involving voice, music, and sound effects. (F, S)

3003. Reporting for the Electronic Media  Gathering, writing, and reporting news and features for the electronic media, including radio/television, cable, and the Internet. Prerequisite: "C" or better in RTV 2003. Word processing skills required. (F, S)

3013. Writing for the Electronic and Digital Media  Methods and techniques of writing non-news radio and television scripts and web content. Emphasis on commercials and program continuity, promotional announcements, public service announcements. Some attention to teleplay, screenplay and corporate video techniques. Word processing skills required. (F, S)

3023. Video Production  A basic course in studio and field production for video and television. Emphasis is placed on techniques for short or long form production, studio and field equipment operation, and preparation for post-production. Must be taken concurrently with RTV 3033, Video Post Production. Prerequisite: RTV 2023 or consent of instructor. (F, S, SU)

3033. Video Post Production  A basic course in post-production for video and television. Emphasis is placed on editing and post-production techniques for TV/video, interactive multimedia, and the World Wide Web. Must be taken concurrently with RTV 3033, Video Post Production. Prerequisite: RTV 2023 or consent of instructor. (F, S, SU)

3303. The Development of the Motion Picture  A study of the development of motion picture theory, technology, and technique. (D)

3323. Television Workshop for Non-Majors  Visual composition and production techniques in television station operation. In-studio experience in newscast operation. (Not open to RTV majors). (F, S)

3333. Radio-Television Advertising and Sales  Study of the structure of the electronic media advertising industry, as well as the basic methods of selling for old and new electronic media. Sales affiliation with ASU-TV. (F, SU)

3343. Advanced Radio Practices  Special practices in radio station operation, with special assignments relative to operation of KASU. Prerequisite: RTV 2023. (F, S, SU)

3363. Communications Research  Study and use of research tools and theories available for mass communications problem solving. Emphasis will be on library research, theory approaches, and applied research as applied to the media. (S)

3673. Seminar in Digital Media and Design  A study of the development and impact of digital media. Also listed as ART 3673. (S)

4053. Public Affairs Reporting for Electronic Journalism  Coverage of municipal and county government agencies, public school boards, community planning and development agencies, and special events within the local community for the electronic media. Prerequisite: RTV 3003. (S)

4063. International Communication Seminar  Critical discussion and analyses of the social, cultural, economic, political, technological and institutional forces governing the exchange of mediated information across national frontiers. (S)

4073. Communications Law and Ethics  Legal and ethical limitations and privileges affecting the mass media. (Also listed as JOUR 4073) (F, S, SU)

4213. Programs and Audiences  Study of broadcast and cable programming, including programming strategies and the role of audiences in program scheduling. Topics include local and syndicated program sources, ratings, program genres, and audience behavior. Prerequisite: RTV 3363 or consent of instructor. (F)

4313. Electronic Media Management  A study of the elements, problems and responsibilities in broadcast station and cable management. Emphasis is placed on an examination of the management function as it relates to the various operating divisions of broadcast stations and single or multi-system cable organizations and to applicable regulatory procedures and requirements of the Federal Communications Commission and other regulatory groups. (F)

4323. News Production and Performance  Experience in producing news programs. Students exercise judgment and make editorial decisions about news content and program continuity. Experience in verbal and non-verbal communication relative to on-camera delivery. Prerequisites: RTV 3003 and RTV 3033 or consent of instructor. (F, S)

4333. Special Topics Seminar  A seminar that addresses current topics in the area of communication. (F)

4353. Corporate Media Production  Study of the field and function of media production for business and non-profit organizations. The course addresses client contact, budgeting, analysis of production problems, design and writing of scripts for promotion, training and news in corporate and industrial settings. Prerequisites: RTV 2003, RTV 3023 and RTV 3033. (F)

4363. Multimedia Production Techniques  Introductory course in multimedia concepts, media elements, platforms, and production. Training in the use of computer-based multimedia authoring systems, hardware and software for media creation/acquisition, and multimedia delivery systems. (F)

4373. Internet Communications  Internet Communications provides students with a thorough understanding and practice in the use of the Information Superhighway. The course will also look at new opportunities for communications professionals. Prerequisite: Basic computer competency. (F)

4423. Electronic Media Delivery Systems  Examination of communications technologies used to deliver information and entertainment to mass and specialized audiences. (F)

4443. Internship  Supervised work for a radio or television station, cable system or allied industry. Offered only during the summer. Prerequisite: Consent of Chairman of Department of Radio-Television. (SU)

4881-3. Special Problems in Electronic Media  Prerequisite: approval of Department Chairman and faculty. (F, S, SU)

(Special Fees: Video Post Production—$25; News Production and Performance—$25; Corporate Media Production—$40)

DEPARTMENT OF SPEECH COMMUNICATION

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Speech Communication (SCOM)

1203. Oral Communication  Develop a proficiency in oral communication. Prerequisite for all other speech communication courses, except SCOM 3203, Business and Professional Speech Communication. (F, S, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
1211. Forensic Activities I Practical debate and competitive speaking. (F, S)
1221. Forensic Activities II Practical debate and competitive speaking. (F, S)
2203. Introduction to Human Communication An introduction to and an overview of speech communication, including concepts and applications. Prerequisite: SCOM 1203 Oral Communication. (D)
2211. Forensic Activities III Practical debate and competitive speaking. (F, S)
2221. Forensic Activities IV Practical debate and competitive speaking. (F, S)
2233. Oral Interpretation Theory and practice of reading aloud, with emphasis on the emotional and intellectual content of literature. (F)
2243. Principles of Argumentation Principles of logical reasoning used in advocacy, analysis, use of evidence, inductive and deductive reasoning. (S -even)
2903. Introduction to Health Communication A case study based approach to examining major communication issues affecting communication in health care settings and about health care, including patient-provider interaction, information dissemination, cultural concerns, ethical issues, and social support.
3203. Business and Professional Speech Communication Speech communication needs of business and professional people. (F, S)
3211. Forensic Activities V Practical debate and competitive speaking. (F, S)
3221. Forensic Activities VI Practical debate and competitive speaking. (F, S)
3233. Advanced Oral Interpretation Continuation of SCOM 2233. (S)
3243. Principles of Persuasion Theory and practice of persuasion as an instrument in motivating human conduct. (F)
3253. Principles of Listening Principles of listening in the communication process; emphasis on listening improvement. (F -even)
3363. Human Communication Research Methods Study of both qualitative and quantitative methods used in communication research. (S)
3373. Gender Communication Study of the interrelationship between communication and gender in various contexts. (S-odd)
4203. Small Group Communication Group and conference techniques for classroom, business, and professional situations. (S, SU)
4211. Forensic Activities VII Practical debate and competitive speaking. (F, S)
4221. Forensic Activities VIII Practical debate and competitive speaking. (F, S)
4233. Storytelling for Children Principles of storytelling, oral reports, choral reading, and listening improvement. (SU)
4243. Interpersonal Communication Emphasis on increasing the student's capacity for openness, sensitivity, and objective appraisal. (F, SU)
4253. Intercultural Communication Identification of barriers and breakdowns to communication among cultures. (S)
4263. Organizational Communication Dynamics and theories of communication within an organization. (S -even)

4283-6. Internship in Speech Communication Combines relevant work experience with classroom theory. (D)
4293. History and Criticism of American Public Address Historical background and significance of leading orators in America. (S -odd)
4303. Rhetoric of Western Thought Rhetorical theories in the Greek, Roman, Medieval, and modern tradition. (F -odd)
4311-2-3. Special Problem: Varying Topics Prerequisite: Permission of instructor. (may be repeated twice with different topics) (D)
4403. Seminar in Health Communication Study of the major cultural, interpersonal, and public communication issues affecting health communication. (S -odd)
College of Education

Dean, John Beineke
Associate Dean, Don Maness

The faculty of the College of Education teach, conduct research, and provide community and professional service in the areas of pedagogy, behavioral sciences, physical education and sport science, and advanced education-related professional studies. Instructional programs are offered within a student-centered organizational context that values diversity, innovation, and professional reflection; these programs are delivered by a faculty committed to the beliefs that (a) every student can learn, and (b) teachers themselves model commitment to learning by visibly demonstrating their own continuing personal/professional growth.

ADMINISTRATIVE STRUCTURE

The following units are administratively within the College of Education:
- ASU Childhood Services
- Center for Excellence in Education
- Department of Psychology and Counseling
- Department of Educational Leadership, Curriculum, and Special Education
- Department of Teacher Education
- Department of Health, Physical Education, and Sport Sciences
- Professional Education Programs

TEACHER EDUCATION PROGRAM

The College of Education is the unit responsible for the teacher education program in cooperation with other colleges within the university. The teacher education program is coordinated by the College of Education and the interdisciplinary Council on Professional Education. It is strongly recommended that students interested in teacher education and teacher education majors consult their adviser frequently.

The Bachelor of Science in Education degree is offered in the following majors:

- Agriculture Education (BSA)
- Art
- Business Education
- Early Childhood Education (P-4)
- English
- French
- General Science
  - (a) Biology
  - (b) Chemistry
  - (c) Physics
- Health Education
- Mathematics
- Middle-Level Education (4-8)
- Music (BME)
- Physical Education
- Social Science
- Spanish
- Speech Communication and Theatre

The Title II Teacher Education Report Card was enacted by the United States Congress in 1998. Accountability measures for new teachers, which include standardized test scores and other information about the institution's teacher education program, are a part of the institutional and state reports mandated by this legislation. Institutions are required to report this information through publications such as school catalogs and promotional materials sent to prospective students, secondary guidance counselors, and potential employers of their graduates. With increased demands by the public for improved schools and increased student achievement, the knowledge, skills, and dispositions of teachers are central to the success of all students. One component of all teacher education programs is standardized tests. The PRAXIS I test assesses basic computation and literacy skills. The PRAXIS II assesses professional teaching knowledge and academic content knowledge. Below are the PRAXIS I and PRAXIS II scores for the Arkansas State University students during the 2001-2002 academic year. Additional information about teacher education programs at Arkansas State University may be accessed at http://education.astate.edu.
Teacher Education Graduates

<table>
<thead>
<tr>
<th>Major Categories</th>
<th>ASU Pass Rate</th>
<th>State Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Skills [PRAXIS I]</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Professional Knowledge* [PRAXIS II]</td>
<td>88%</td>
<td>96%</td>
</tr>
<tr>
<td>Academic Content Area* [PRAXIS II]</td>
<td>91%</td>
<td>98%</td>
</tr>
<tr>
<td>Totals</td>
<td>96%</td>
<td>99%</td>
</tr>
</tbody>
</table>

PROFESSIONAL EDUCATION REQUIREMENTS FOR SECONDARY MAJORS

General and academic requirements for majors in the secondary teacher education program are listed under the various colleges in this Bulletin.

SCED 2514, Introduction to Secondary Teaching ................................................. 4 sem. hrs. (Prerequisite 15 semester hours)
PSY 3703, Educational Psychology ................................................................. 3 sem. hrs.
SE 3643, The Exceptional Student in the Regular Classroom ................... 3 sem. hrs.
Admission to the Teacher Education Program is a prerequisite to enrollment in the following courses:
SCE 3515, Performance Based Instructional Design ..................................... 5 sem hrs.
SCE 4713, Educational Measurement with Computer Applications ........... 3 sem. hrs.
ED__45__3, Methods and Materials for Teaching in the Secondary School ............................................ 3 sem. hrs.

Professional Semester:
During the professional semester the student will be required to spend sixteen full weeks in a North Central Association approved cooperating school—for which the student receives twelve (12) semester hours of credit.

TI__ 4826, Teaching Internship in the Secondary School ............................ 12 sem. hrs.
TOTAL ................................................................. 33 sem. hrs.

TRANSPORTATION FOR FIELD EXPERIENCES

Students are required to provide their own transportation to school field experiences in the Jonesboro area and surrounding counties. When determining educational costs, students must consider additional expenses for these experiences.

GRADUATION REQUIREMENT

Teacher education students (BSA-Agriculture Education; BME; and BSE) must have a minimum overall GPA of 2.50 to be eligible for graduation. Some Teacher Education programs will require students to take the PRAXIS II examination(s) as a graduation requirement. Check with your academic adviser to determine your PRAXIS II requirement(s).

However, students who wish to secure an Arkansas teaching license are required to take and pass the PRAXIS II examination(s). Therefore, all students are strongly encouraged to determine your PRAXIS II requirement(s).
Department of Teacher Education

Professor Mitchell Hollifield, Chair; Professors Beineke, Cline, Cox, Dickinson, Foldesay, Justen; Associate Professors Bradley, Holman, McBride; Assistant Professors Campbell, Henley, Lamkin, Lamb-Milligan, Maness, Nichols, Saleh

The mission of the Department of Teacher Education encompasses three areas: teaching, service, and research. The major purpose of the department is teaching, which contributes significantly toward the accomplishment of the department's primary goals: preparing Professionally Emerging Teachers and Emerging Professionals in the fields of early childhood education, elementary education, middle grades education, secondary education, and reading. The department also offers a graduate program in early childhood services (see Graduate Bulletin). A commitment is made to students in the degree programs as faculty assist students through a well-defined advisement process. Another function of the department is service, consultation to public and private schools, to federal and state agencies and programs, and to professional organizations. The area of research and scholarly pursuits contributes to the preparation of students for teaching, service, and research. The major purpose of the department is teaching, which contributes significantly toward the accomplishment of the department's primary goals: preparing Professionally Emerging Teachers and Emerging Professionals in the fields of early childhood education, elementary education, middle grades education, secondary education, and reading. The department also offers a graduate program in early childhood services (see Graduate Bulletin). A commitment is made to students in the degree programs as faculty assist students through a well-defined advisement process. Another function of the department is service, consultation to public and private schools, to federal and state agencies and programs, and to professional organizations. The area of research and scholarly pursuits contributes to the improvement of specific educational and pedagogical issues and concerns.

### Endorsement in Special Education

Arkansas teacher licensure standards require a regular education degree as a pre or corequisite for endorsement in special education. Students who wish to teach special education prior to the subject area (P-4) must complete requirements for a regular education P-4 license, while students who wish to teach special education grade 4-12 must complete requirements for either a regular education grades 4-8 or grades 7-12 teaching license. Credentials to Teach Special Education are added to a General Education Teaching License, this is called an endorsement. An endorsement can be added through an approved program of study or through completion of a dual certification program.

### Department of Teacher Education

Associate Professor Veda McClain, Chair; Professors Gilbert, Lawler-Prince, Towery; Associate Professors Grymes, Smith, Trussock; Assistant Professors Campbell, Clark, Davidson, Fiala, Johnson, McJunkin, McLin, Malinsky, Meeks, Owens, Ross, Skinner, Stepka, Williams; Instructors Bacot, Donaghy, Harrington, Jones

### General Education Requirements:

**Sem. Hrs.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 1003, 1013 Freshman English I &amp; II</td>
<td>6</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 1023, College Algebra</td>
<td>3</td>
</tr>
<tr>
<td><strong>Critical Thinking</strong></td>
<td></td>
</tr>
<tr>
<td>SCOM 1200, Oral Communications</td>
<td>3</td>
</tr>
<tr>
<td><strong>Understanding Global Issues</strong></td>
<td></td>
</tr>
<tr>
<td>ANTH 2233, Introduction to Cultural Anthropology OR</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2613, Introduction to Geography</td>
<td>3</td>
</tr>
<tr>
<td><strong>Arts and Humanities</strong></td>
<td></td>
</tr>
<tr>
<td>Students must complete three courses from this section. At least one</td>
<td></td>
</tr>
<tr>
<td>must be a fine arts and at least one must be a humanities course.</td>
<td></td>
</tr>
<tr>
<td>Fine Arts:</td>
<td></td>
</tr>
<tr>
<td>MUS 2503 Fine Arts - Music</td>
<td></td>
</tr>
<tr>
<td>THEA 2503 Fine Arts - Theatre</td>
<td></td>
</tr>
<tr>
<td>ART 2503, Fine Arts - Visual Humanities:</td>
<td></td>
</tr>
<tr>
<td>ENGI 2003, Intro to Literature of the Western World I</td>
<td>9</td>
</tr>
<tr>
<td>ENGI 2013, Intro to Literature of the Western World II</td>
<td></td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>POSC 2103, Introduction to US Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2013, Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2213, Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL 1003, Biological Science AND BIOL 1001, Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHSC 1203, Physical Science AND PHSC 1201, Lab</td>
<td>4</td>
</tr>
<tr>
<td>Health and Wellness</td>
<td></td>
</tr>
<tr>
<td>PE 1002, Concepts of Fitness</td>
<td>2</td>
</tr>
<tr>
<td><strong>Enhancements</strong></td>
<td></td>
</tr>
<tr>
<td>HISI 2763, US History to 1876 OR</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2773, US History Since 1876 OR</td>
<td></td>
</tr>
</tbody>
</table>

**Total General Education Hours** 46

---

**Transfer Credit Policy**

Courses completed at two-year institutions will not be accepted as transfer credits for upper level specialty area and professional studies courses numbered 3000 and above. Transfer credit in the major from any institution is subject to approval by the Department of Teacher Education. Reviews must be requested in a timely manner so as to allow for adequate review by the department. Compliaency of course content, length of time since course completion, and adequacy of relevant field experiences will form but not be limited to the criteria for judging acceptance.

**Acceptance of Work from Previous Degrees or Enrollments**

Course work in the major field completed more than seven (7) years prior to the student's enrollment in either the BSE in Early Childhood Education or the BSE in Middle Level Education will be reviewed for relevance and may not be acceptable to completion of the BSE degree.

---

**Major in Early Care and Education**

**Bachelor of Science**

Minor in Family Studies

Department of Teacher Education

---

See the ASU web page (www.astate.edu) for current bulletin information.
Interdisciplinary Support:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 3903, Normal Language Development</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 3013, Practical Writing</td>
<td>3</td>
</tr>
<tr>
<td>HLT 42523, First Aid And Safety</td>
<td>3</td>
</tr>
<tr>
<td>MIS 1503, Microcomputer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CS 1043, Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3063, Minority Groups</td>
<td>3</td>
</tr>
<tr>
<td>SCOMM 423, Storytelling for Children</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 1013 AND SPAN 1023, Elementary Spanish I &amp; II</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Interdisciplinary Support Hours</strong></td>
<td>24</td>
</tr>
</tbody>
</table>

Family Studies Minor  

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 3203, Sociology of Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>PSY 3403, Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SW 3313, Introduction to Child Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SW 3343, Child Abuse and Neglect</td>
<td>3</td>
</tr>
<tr>
<td>NRS 2200, Basic Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4053, Today's Families: Interdisciplinary Approaches</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Minor Hours</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

Early Care and Education Major  

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECH 2013, Survey of Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECH 2023, Child Development</td>
<td>3</td>
</tr>
<tr>
<td>SE/ELSE 3023, Characteristics of Individuals with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SE/ELSE 4683, Methods of Working with Families</td>
<td>3</td>
</tr>
<tr>
<td>ECH 3603, Literacy for Children and Families</td>
<td>3</td>
</tr>
<tr>
<td>ECH 3613, Strategies for Supporting Learning Through Play</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4603, Physical and Psychological Environments for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4613, Curriculum and Assessment for Early Care and Education</td>
<td>3</td>
</tr>
<tr>
<td>ELED 4053, Teacher-Made Materials for Use in Learning and Interest Centers</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4623, Child Care Program Management and Mentoring</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4636, Practicum in Early Care and Literacy</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Major Hours</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

**Total PROGRAM HOURS**: 124

Early Childhood Education  

Bachelor of Science in Education  

The following is one suggested sequence in which requirements for the Bachelor of Science in Early Childhood Education may be completed. (See pages 33-24 for developmental courses required for students with lower ACT scores.) Students should consult with their adviser for a plan that best meets individual needs. Many courses have prerequisites identified with the course description; students are responsible for completing the appropriate prerequisite courses.

**Freshman Year—Semester 1**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1013</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1001 and 1003</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1020</td>
<td>3</td>
</tr>
<tr>
<td>PE 1002</td>
<td>3</td>
</tr>
<tr>
<td>MIS 1503</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sophomore Year—Semester 1</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 2013</td>
<td>3</td>
</tr>
<tr>
<td>PSC 2103</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2013</td>
<td>3</td>
</tr>
<tr>
<td>ECH 2023</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sophomore Year—Semester 2</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 1013</td>
<td>3</td>
</tr>
<tr>
<td>PSC 2103</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 2235 OR GEOG 2613</td>
<td>3</td>
</tr>
<tr>
<td>ECH 2023</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Major Hours</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

**Total Program Hours**: 124

See the ASU web page (www.astate.edu) for current bulletin information.
Major in Early Childhood Education
Bachelor of Science in Education with Emphasis in Special Education
(Preschool - Grade 4 License)

This program will allow student to become certified as a P-4 Early Childhood Teacher and have endorsement in Special Education P-4.

General Education Requirements:
Sem. Hrs.
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79

Specific General Education Requirements:
All Early Childhood-Elementary majors must take the following:
ENG 1003, Freshman English I
ENG 1013, Freshman English II
ENG 2003, Intro to W Lit I / ENG 2013, Intro to W Lit II
Biol 1001, Laboratory for Biological Science
Biol 1002, Biological Science
MATH 1023, College Algebra
PHSC 1203, Physical Science
PSY 2013, Introduction to Psychology
HIST 1013 or 1023, World Civilization To or Since 1660
HIST 2763 or 2773, The United States To or Since 1876
PSYC 2103, Introduction to United States Government
SCOM 1203, Oral Communication
PE 1002, Concepts of Fitness

Enhancement course: ECH 4043, Social Foundations of Education and others as needed

Specialty Area Requirements:
Sem. Hrs.
MATH 2113, Mathematics for Elementary School Teachers I ........................................ 3
MATH 2123, Mathematics for Elementary School Teachers II ........................................ 3
MUED 3612, Music and Methods for the Classroom Teacher ........................................... 2

Licensure Requirement:
Sem. Hrs.
HIST 3308, History of Arkansas .................................................................................. 3

Professional Education Requirements:
Sem. Hrs.
ELSE 3643, Exceptional Student in the Regular Classroom ............................................... 3
ELED 2022, Introduction to Elementary School Teaching: Field Experience I .................... 2
ELED 3003, Human Growth and Learning ........................................................................ 3
ELED 3033, Effective Teaching Strategies ....................................................................... 3
ELED 3036, Integration of Technology into the Curriculum ............................................. 3
ECH 4063, Social Foundations of Education ................................................................... 3
RDNG 4403, Early Literacy: Theory and Practice ........................................................... 3
ECH 3003, Program Development and Management for Early Care and Education Centers ............................................................................................................ 3
ECH 3013, Children’s Literature in the Preschool and Primary Grades ......................... 3
ECH 3043, Program Development and Management for Early Care and Education Centers ............................................................................................................ 3
ECH 3053, Curriculum Development in Early Childhood Education ............................... 3
ECH 3063, Individualizing Programs for Children and Families .................................... 3
ECH 3073, Children, Families & Community Relationships: Field Experiences I ......... 3
ECH 3083, Integration of Technology into the Curriculum ............................................. 3
ECH 4012, Classroom Management ............................................................................. 2
ECH 4013, Field Experiences III: Pre-Internship ............................................................ 2
ECH 4023, Methods and Materials of Language Arts and Social Studies ..................... 3
ECH 4043, Methods and Materials of Math and Science .............................................. 3
ECH 4063, Social Foundations of Education (enhancement course) ............................. (3)
ECH 4086, Teaching Internship in Early Childhood Education - Kindergarten ............. 6
ECH 4096, Teaching Internship in the Elementary School - Primary Grades 1-3 ......... 6
RDNG 3203, Foundations of Reading ........................................................................... 3
RDNG 4403, Early Literacy: Theory and Practice ........................................................... 3

Educational Assessment and Diagnosis ....................................................................... 3

Major Requirements:
Sem. Hrs.
ECH 4063*, Methods of Working with Individuals with Mild Disabilities .................. 3
ECH 4073, Children, Families, and Community Relationships: Field Experiences II .... 3
ECH 4096, Teaching Internship in the Elementary School—Primary Grades 1-3 ......... 6

Prerequisite: Admission to the Teacher Education Program

See the ASU web page (www.astate.edu) for current bulletin information.
College of Education  
Department of Teacher Education  
BSE in Early Childhood Education / P-4 with Emphasis in Special Education

This program will allow student to become certified as a P-4 Early Childhood Teacher and have endorsement in Special Education P-4.

Freshman Year—Semester 1 (16 hrs)  
ENG 1003  Freshman English I  
BIOL 1001 and 1003  Biological Science & Lab  
MATH 1023  College Algebra  
SCCM 1003  Oral Communications  
HIST 1013 or HIST 1023  World Civilization  

Freshman Year—Semester 2 (18 hrs)  
ENG 1013  Freshman English II  
GSP 1201 and 1203  Physical Science & Lab  
ART 2503, MUS 2503 or THEA 2503  Fine Arts  
HIST 2763 or HIST 2721  U.S. History  
PE 1052  Concepts of Fitness  
SOC 2313 (race) or ANTH 2333/ECON 2363/ECON 2313/GEOSCI 2613

Sophomore Year—Semester 1 (16 hrs)  
ENG 2003, ENG 2013, PHIL 1103 (select one) Humanities  
PSY 2013  Psychology  
POSQ 2103  Intro to American Govt  
MATH 2113  Math for Elem Tchrs I  
ECH 2021  Intro to Teaching: Field I  
ECH 2002  Intro to Technology

Sophomore Year—Semester 2 (18 hrs)  
MATH 2123  Math for elem Tchrs II  
GSP 3203  Science for Teachers  
ECH 2013  Survey of Early Childhood Education  
ECH 2023  Child Development  
ELSE 3463  Exceptional Children in Regular Classroom

Junior Year—Semester 1 (18 hrs)  
ELSE 4033  Behavior Intervention & Consultation  
ECH 3013  Children’s Literature  
ECH 3043  Program Development  
ECH 3073  Child, Fam & Comm Rel: Field II  
ECH 3063  Integration of Technology in Curriculum  
RDNG 3003  Foundations of Reading

Junior Year—Semester 2 (18 hrs)  
MLS 3003  Assessing and Evaluating Student Behavior  
MLS 3032, Foundations of Reading  
MLS 3013, Literacy Through Literature for the Middle Grades  
MLS 3033, Effective Teaching Strategies  
MLS 3073, Key Issues of Teaching and Learning in the Middle Grades

Senior Year—Semester 1 (18 hrs)  
MATH 2123  Math for Teachers II  
GSP 3203  Curriculum Development  
ELSE 4683  Methods for Working with Families  
ELSE 4043  Educ Assessment & Diagnosis  
ELSE 4063  Methods of Work Individ Mild Disabilities

Senior Year—Semester 2 (12 hrs)  
RDNG 4434, Reading in the Content Areas: Middle and Secondary Schools  
RDNG 4031, Remediation and Support in the Middle Grades  
ELSE 4063, Social Foundations of Education  
MLED 4116, Teaching Internship Grades 6-8

TOTAL HOURS: 137

Major in Middle-Level Education  
Bachelor of Science in Education  
(Grades 4-8)

The Middle-Level Education program is designed to prepare teachers to teach in grades 4-8 as a mathematics and science or as an English/language arts and social studies specialist and in grades 4-6 as a self-contained generalist. Students should select an area of specialization in consultation with their middle-level academic advisor.

General Education Requirements:  
Sem. Hrs.  
ENG 1003 and 1013, Composition I and II  ... 6

See the ASU web page (www.asate.edu) for current bulletin information.
Licensure Requirement:
HIST 3038, History of Arkansas ................................................................. 3

Total Program for mid-level math/science: 138

Area of Specialty English/Language Arts and Social Studies

English
ENG 3003, Advanced Composition ........................................................... 3
ENG 3583, Literature for Adolescents ..................................................... 3
ENG 4063, Comparative Modern Grammars ......................................... 3
Elective ................................................................................................. 3
Total ................................................................................................. 12

Social Studies
HIST 1013 or 1023, World Civilization To or Since 1660 .................... 3
HIST 2763 or 2773, The United States To or Since 1876 ....................... 3
HIST 3083, History of Arkansas ............................................................... 3
GEOG 3603 World Regional Geography .............................................. 3
Elective ................................................................................................. 3
Total ................................................................................................. 15

All language arts and social studies electives must be approved in advance by your middle-level education adviser who will assist you in obtaining a balance of various perspectives appropriate for teaching in the middle grades.

Additional Specialty Courses required for language arts and social studies
MATH 2113, Math for Teachers I ............................................................... 3
GSP 3203, Science in the Elementary Classroom ................................. 3
Total 6

Total Program 136

Department of Health, Physical Education, and Sport Sciences

Professor Jim L. Stillwell, Chair; Professor Adams, T.; Associate Professors Albright, C., Comeau, M., Fincicum, P., Gaines, W.; Assistant Professors Church, B., Dean, B., Graves, M., LaVetter, D.; Instructors Adams, H., Mathis, M., Mooneyhan, A., Perkey, D., Sibrama, A.

The mission of the Department of Health, Physical Education, and Sport Sciences is threefold. First, to provide curricula and instruction that will enhance the development of physical, mental, social, and emotional qualities essential for living a quality life and encouraging positive health behaviors for all students. Second, to provide quality professional preparation programs in the fields of athletic training, exercise science, health, physical education and sport management that meet appropriate standards. Third, to promote an overall wellness environment for all students and employees of Arkansas State University.

To accomplish its mission, the department places its primary focus on quality teaching. In addition to its emphasis on teaching, the department strives to provide service to the college and the university, to elementary and secondary schools, to the community and the state, and to its related professional organizations and agencies. The department also endeavors to engage in scholarly pursuits that will enhance the professional growth of its faculty and contribute to knowledge about human performance.

Athletic Training
Bachelor of Science

The Arkansas State University Athletic Training Program is designed to prepare students for the challenges of the expanding allied health profession of athletic training. Through the combination of extensive classroom and clinical experiences in athletic training, graduates of the program achieve the entry-level competencies necessary to challenge the certification examination offered by the National Athletic Trainers’ Association Board of Certification and embark on a career as a certified athletic trainer. The athletic training program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Interested students should contact the Athletic Training Program Director at (870) 972-3066 for more information.

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79

Specific General Education Requirements:
Students in this major must take the following:
CHEM 1013, General Chemistry I
MATH 1033, College Algebra
PSY 2013, Introduction to Psychology
SOC 2123, Introduction to Sociology

Required Support Courses:

1. Required for teaching in the middle grades.
2. Education adviser who will assist you in obtaining a balance of various perspectives appropriate for teaching in the middle grades.
3. See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79

Total Program 136
Athletic Training Admission Requirements

All candidates for a Bachelor of Science in Athletic Training must obtain official admission to the Athletic Training Program. Students desiring admission to the Athletic Training Program must meet the following criteria:

1. Declared major in Bachelor of Science in Athletic Training.
2. Minimum of 80 semester hours.
3. Minimum GPA of 2.50 overall.
4. Completion of the following courses with a grade of “C” or better in each: CHEM 1011, CHEM 1013, ZOOL 2001, ZOOL 2003, ZOOL 2011, ZOOL 2013, PHYS 2054 or 2133, HP 2015, HLTH 2513, AT 2731, AT 2833.
5. Completion of two (2) semesters of directed clinical observation with 50 hours per semester at Arkansas State University and completion of all assigned directed observer proficiency.
6. Completion of personal interview with program selection committee upon request.
7. Submission of all program application forms to program director.

Candidates for the Athletic Training Program must meet all seven criteria listed above. The number of appointments to the program will vary from year to year depending on space availability. Program application materials must be received by April 1 of each year in order to be considered for fall entry into the Athletic Training Program. Candidates will be notified of their admission status after June 1 of each academic year.

Technical standards for admission to the Athletic Training Program can be found on the program’s website at http://www.cc.astate.edu/atala/athtrain.html or in the ASU Athletic Training Handbook.

Prior to taking first clinical experience course the student must hold
1. Professional liability insurance (minimum $2,000.00/0.00/0.00 coverage)
2. Acceptable immunization status including Hepatitis B and TB screening
3. Completed physical examination form

Exercise Science Bachelor of Science

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78—79

Sem. Hrs. 46-49

Specific General Education Requirements:

All students in the Exercise Science program are required to take the following general education science courses and must complete these courses with a “C” or better:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1011 Lab for Gen Chem</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1013 Gen Chem I</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Support Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 2513, Principles of Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 2523, First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4543, Drug Use and Abuse</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4633, Health Promotion Assessment Planning</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4643, Health Promotion Implementation and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2003, Human Anatomy/Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2001, Human Anatomy/Physiology Lab I</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2013, Human Anatomy/Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2011, Human Anatomy/Physiology Lab II</td>
<td>3</td>
</tr>
<tr>
<td>HP 4133, Performance Enhancement and Metabolism for Sport and Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>PE 4843, Philosophy and Ethics in Sport</td>
<td>3</td>
</tr>
</tbody>
</table>

Sem. Hrs. 29

Exercise Science Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES 2063, Foundations of Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>ES 3543, Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>ES 3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>ES 3623, Techniques of Physiological Fitness Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ES 3633, Techniques of Aerobic Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>ES 3713, Cardiovascular Physiology</td>
<td>3</td>
</tr>
<tr>
<td>ES 3743, Research and Statistical Methods in Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>ES 4673, Fitness Programming for Disabled</td>
<td>3</td>
</tr>
<tr>
<td>ES 4683, Exercise Prescription</td>
<td>3</td>
</tr>
<tr>
<td>ES 4693, Techniques of Strength Training and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>ES 4763, Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>ES 4843, Practicum/Pre-Internship</td>
<td>3</td>
</tr>
<tr>
<td>ES 4913, Applied Motor Learning</td>
<td>3</td>
</tr>
<tr>
<td>ES 4996 or ES 4963 and ES 4973, Internship</td>
<td>6</td>
</tr>
</tbody>
</table>

Sem. Hrs. 45

Electives:

See General Education Curriculum for Baccalaureate Degrees, pages 78—79

Sem. Hrs. 4

Total 124

Health Promotion Bachelor of Science

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78—79

Sem. Hrs. 46-49

Specific General Education Requirements:

Students in this major must take the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOOL 2001, Laboratory for Human Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2003, Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2011, Laboratory for Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>HP 2013, Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>NRS 2253, Basic Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3343, Sociology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>NRS 3353, Aging and the Older Adult</td>
<td>3</td>
</tr>
<tr>
<td>ECH 3083, Integration of Technology into the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 3673, Desktop Publishing &amp; Publication Design</td>
<td>3</td>
</tr>
<tr>
<td>ES 3543, Human Anatomy and Anatomic Fundamentals of Motion</td>
<td>3</td>
</tr>
<tr>
<td>ES 3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>ES 3563, Techniques of Physiological Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ES 3653, Techniques of Aeriobic Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>ES 4693, Techniques of Strength Training and Conditioning</td>
<td>3</td>
</tr>
</tbody>
</table>

Sem. Hrs. 38

Electives: (depending on general education requirements)

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 2513, Principles of Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 2523, First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 2833, Foundations in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 2853, Public and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 3563, Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4513, Consumer Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4523, Current Issues in Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4543, Drug Use and Abuse</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4633, Health Promotion Assessment and Planning</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4643, Health Promotion Implementation and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 4896, Internship in Health Promotion</td>
<td>6</td>
</tr>
</tbody>
</table>

Sem. Hrs. 5-8

Total 124

Health Education Bachelor of Science in Education

The Arkansas Department of Education has proposed changes to teacher and administrator licenses. These changes will affect students entering Arkansas State University in academic year 1997-98. Please consult with your adviser for information as you proceed through your program of studies. Additional information will be available in department offices and the Office of the Dean of Education.

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79

Sem. Hrs. 46-49

Required Support Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOOL 2001, Laboratory for Human Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2003, Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2011, Laboratory for Human Anatomy and Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>HP 2013, Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>NRS 2253, Basic Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3343, Sociology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>NRS 3353, Aging and the Older Adult</td>
<td>3</td>
</tr>
<tr>
<td>ECH 3083, Integration of Technology into the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 3673, Desktop Publishing &amp; Publication Design</td>
<td>3</td>
</tr>
<tr>
<td>ES 3543, Human Anatomy and Anatomic Fundamentals of Motion</td>
<td>3</td>
</tr>
<tr>
<td>ES 3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>ES 3563, Techniques of Physiological Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ES 3653, Techniques of Aerobic Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>ES 4693, Techniques of Strength Training and Conditioning</td>
<td>3</td>
</tr>
</tbody>
</table>

Sem. Hrs. 38

Electives: (depending on general education requirements)

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1011 Lab for Gen Chem</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1013 Gen Chem I</td>
<td>3</td>
</tr>
</tbody>
</table>

Sem. Hrs. 29

See the ASU web page (www.astate.edu) for current bulletin information.
Additionl Requirements:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH2513, Principles of Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>SCOM1203, Oral Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Health Core Requirements:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH2383, Foundations in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH2523, First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>NRS2003, Basic Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HP2013, Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HLTH3563, Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>HLTH4513, Consumer Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH4543, Drug Use and Abuse</td>
<td>3</td>
</tr>
<tr>
<td>ES3543, Human Anatomy and Anatomic Fundamentals of Motion</td>
<td>3</td>
</tr>
<tr>
<td>ES3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>ES4693, Techniques of Strength Training and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>ELED3063, Integration of Technology into the Curriculum</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Courses:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE4753, The Physical Education Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>PE4663, Motor Skills Development for Children</td>
<td>3</td>
</tr>
<tr>
<td>HLTH3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>HLTH4513, Consumer Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH4543, Drug Use and Abuse</td>
<td>3</td>
</tr>
<tr>
<td>ES3543, Human Anatomy and Anatomic Fundamentals of Motion</td>
<td>3</td>
</tr>
<tr>
<td>ES3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>ES4693, Techniques of Strength Training and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>ELED3063, Integration of Technology into the Curriculum</td>
<td>3</td>
</tr>
</tbody>
</table>

Professional Education Requirements:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCED2514, Introduction to Secondary Teaching</td>
<td>4</td>
</tr>
<tr>
<td>PSY3703, Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SE3643, The Exceptional Student in Regular Classroom</td>
<td>3</td>
</tr>
<tr>
<td>ELED4533, Strategies for Teaching Health Education</td>
<td>3</td>
</tr>
<tr>
<td>SCED3515, Performance Based Inst. Design</td>
<td>5</td>
</tr>
<tr>
<td>SCED4713, Educational Measurement with Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>TIPE4826-2, Teaching Internship in Secondary School</td>
<td>12</td>
</tr>
</tbody>
</table>

Total 124

Physical Education Bachelor of Science in Education P-12

The Arkansas Department of Education has proposed changes to teacher and administrator licenses. These changes will affect students entering Arkansas State University in academic year 1997-98. Please consult with your adviser for information as you proceed through your program of studies. Additional information will be available in department offices and the Professional Education Programs office.

General Education Requirements:  
See General Education Curriculum for Baccalaureate Degrees pages 78 and 79

Specific General Education Requirements:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOM1203, Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Requirements:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH2513, Principles of Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>HLTH2523, First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HLTH3543, Human Anatomy and Anatomic Fundamentals of Motion</td>
<td>3</td>
</tr>
<tr>
<td>HLTH3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>HLTH4543, Foundations of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PE3803, Physical Education for Teachers of Young Children</td>
<td>2</td>
</tr>
<tr>
<td>PE3823, Rhythmic Activities and Fundamental Movement for Elementary Grades</td>
<td>2</td>
</tr>
<tr>
<td>PE3832, Theory and Practice of Teaching Fitness Concepts</td>
<td>2</td>
</tr>
<tr>
<td>PE3842, Theory and Practice of Teaching Leisure Sports</td>
<td>2</td>
</tr>
<tr>
<td>PE3862, Theory and Practice of Teaching Racket Sports</td>
<td>2</td>
</tr>
<tr>
<td>PE4703, Adaptive Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PE4753, The Physical Education Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>PE4783, Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PE4783, Organization and Administration of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PE4793, Evaluation in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>ELED4533, Strategies for Teaching Health Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Coaching: (Required in Arkansas for coaching football, basketball, and track)

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>PE3872, Rules and Officiating</td>
<td>2</td>
</tr>
<tr>
<td>PE3873, Concepts of Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>PE4873, Organization and Administration of Interscholastic Athletics</td>
<td>3</td>
</tr>
<tr>
<td>ES4693, Techniques of Strength Training and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>Two of the following courses or the equivalent:</td>
<td>4</td>
</tr>
<tr>
<td>PE4822, Theory and Practice of Coaching Football</td>
<td></td>
</tr>
<tr>
<td>PE4832, Theory and Practice of Coaching Basketball</td>
<td></td>
</tr>
<tr>
<td>PE4842, Theory and Practice of Coaching Track</td>
<td></td>
</tr>
<tr>
<td>PE4852, Theory and Practice of Coaching Baseball</td>
<td></td>
</tr>
<tr>
<td>PE4862, Theory and Practice of Coaching Gymnastics</td>
<td></td>
</tr>
<tr>
<td>PE4872, Theory and Practice of Coaching Volleyball</td>
<td></td>
</tr>
<tr>
<td>PE4882, Theory and Practice of Coaching Soccer</td>
<td></td>
</tr>
<tr>
<td>** TIPE 4826, Teaching Internship in the Secondary School</td>
<td>12</td>
</tr>
</tbody>
</table>

*See Bachelor of Science in Education degree - College of Education  
** Prerequisite: Admission into the Teacher Education Program

Total 128

Physical Education (Elementary certification P-8):  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELED3003, Human Growth and Learning</td>
<td>3</td>
</tr>
<tr>
<td>HLTH2523, First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HLTH3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>PE3802, Physical Education for Teachers of Young Children</td>
<td>2</td>
</tr>
<tr>
<td>PE3832, Theory &amp; Practice of Teaching Fitness Concepts</td>
<td>2</td>
</tr>
<tr>
<td>PE3823, Rhythmic Activities and Fundamental Movement for Elementary Grades</td>
<td>3</td>
</tr>
<tr>
<td>PE4693, Motor Skills Development for Children</td>
<td>3</td>
</tr>
<tr>
<td>PE4703, Adaptive Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PE4783, Organization and Administration of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PE4832, Practical in Elementary Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>EDHE4533, Strategies for Teaching Health Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 31

Health Education:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH2523, First Aid and Safety</td>
<td>3</td>
</tr>
<tr>
<td>EDHE4533, Strategies for Teaching Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH4573, The School Health Program</td>
<td>3</td>
</tr>
<tr>
<td>Two of the following courses or the equivalent:</td>
<td>3</td>
</tr>
<tr>
<td>HLTH3543, Human Anatomy and Anatomic Fundamentals of Motion</td>
<td>3</td>
</tr>
<tr>
<td>HLTH3553, Basic Physiology of Activity</td>
<td>3</td>
</tr>
<tr>
<td>BIOL2103, Microbiology</td>
<td>3</td>
</tr>
</tbody>
</table>

Health Electives (Jr. Sr.)  

Total 24

*Due to state licensure changes, this option may not be available.

Driver Education:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRED4263, Basic Driver Education</td>
<td>3</td>
</tr>
<tr>
<td>DRED4279, Advanced Driver Education</td>
<td>3</td>
</tr>
<tr>
<td>HLTH2523, First Aid and Safety</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 9

See the ASU web page (www.astate.edu) for current bulletin information.
## COLLEGE OF EDUCATION COURSE DESCRIPTIONS

### General Education Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUD 1A05</td>
<td>Teaching Internship in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4086</td>
<td>Teaching Internship Kindergarten</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4096</td>
<td>Teaching Internship Primary</td>
<td>3</td>
</tr>
<tr>
<td>MLED 4106</td>
<td>Teaching Internship Grades 4-5</td>
<td>3</td>
</tr>
<tr>
<td>MLED 4116</td>
<td>Teaching Internship Grades 6-8</td>
<td>3</td>
</tr>
</tbody>
</table>

### Required Major Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELED 2022</td>
<td>Introduction to Teaching (teacher education portfolio fee)</td>
<td>$30.00</td>
</tr>
<tr>
<td>RDNG 3203</td>
<td>Foundations of Reading Instruction (P-4 &amp; 4-8 teacher education admission fee)</td>
<td>$25.00</td>
</tr>
<tr>
<td>SCED 3515</td>
<td>Performance Based Instructional Design</td>
<td>3</td>
</tr>
<tr>
<td>RDNG 3203</td>
<td>Foundations of Reading Instruction</td>
<td>3</td>
</tr>
<tr>
<td>ELED 2022</td>
<td>Introduction to Teaching (teacher education portfolio fee)</td>
<td>$30.00</td>
</tr>
<tr>
<td>JOUR 1343</td>
<td>TV Workshop (Non-Major)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 2003</td>
<td>News Writing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 3023</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 3091</td>
<td>History of Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 4093</td>
<td>Sport, Business, and Opinion Writing</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4713</td>
<td>Risk Management and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4743</td>
<td>Business Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4773</td>
<td>Legal Issues in Business</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4875</td>
<td>Organization and Management of Sports Programs</td>
<td>3</td>
</tr>
<tr>
<td>PE 3903</td>
<td>Sports in America</td>
<td>3</td>
</tr>
<tr>
<td>PE 4743</td>
<td>Legal Issues in Sport</td>
<td>3</td>
</tr>
<tr>
<td>PE 4773</td>
<td>Organization and Management of Sports Programs</td>
<td>3</td>
</tr>
<tr>
<td>PE 4983</td>
<td>Philosophy and Ethics in Sports</td>
<td>3</td>
</tr>
<tr>
<td>PE 4875</td>
<td>Sports Admin and Intercollegiate Athletics</td>
<td>3</td>
</tr>
<tr>
<td>SCOME 203</td>
<td>Business &amp; Professional Speech</td>
<td>3</td>
</tr>
</tbody>
</table>

### Electives:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 1883</td>
<td>Foundations of Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>PE 3873</td>
<td>Facility and Event Management</td>
<td>3</td>
</tr>
<tr>
<td>PE 3903</td>
<td>Sports in America</td>
<td>3</td>
</tr>
<tr>
<td>PE 4743</td>
<td>Legal Issues in Sport</td>
<td>3</td>
</tr>
<tr>
<td>PE 4773</td>
<td>Organization and Management of Sports Programs</td>
<td>3</td>
</tr>
<tr>
<td>PE 4983</td>
<td>Philosophy and Ethics in Sports</td>
<td>3</td>
</tr>
<tr>
<td>PE 4875</td>
<td>Sports Admin and Intercollegiate Athletics</td>
<td>3</td>
</tr>
<tr>
<td>SCOME 203</td>
<td>Business &amp; Professional Speech</td>
<td>3</td>
</tr>
</tbody>
</table>

### Emphasis Area:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUD 4A05</td>
<td>Teaching Internship in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4086</td>
<td>Teaching Internship Kindergarten</td>
<td>3</td>
</tr>
<tr>
<td>ECH 4096</td>
<td>Teaching Internship Primary</td>
<td>3</td>
</tr>
<tr>
<td>MLED 4106</td>
<td>Teaching Internship Grades 4-5</td>
<td>3</td>
</tr>
<tr>
<td>MLED 4116</td>
<td>Teaching Internship Grades 6-8</td>
<td>3</td>
</tr>
</tbody>
</table>

### Special Topics Workshop:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 3103</td>
<td>Laboratory for Quantitative Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 3101</td>
<td>Laboratory for Quantitative Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 3103</td>
<td>Laboratory for Quantitative Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 3101</td>
<td>Laboratory for Quantitative Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSY 3103</td>
<td>Laboratory for Quantitative Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

### Teacher Internship Fee:

- **$10/credit hour**
  - ECH 4086 Teaching Internship Kindergarten
  - ECH 4096 Teaching Internship Primary
  - MLED 4106 Teaching Internship Grades 4-5
  - MLED 4116 Teaching Internship Grades 6-8
  - TIAQ, TIAF, TII, TIBU, TICH, TIEN, TII, TILA, TIMA, TIMU, TIPE, TIPH, TISP 4826 Teaching Internship in the Secondary School

### DEPARTMENT OF PSYCHOLOGY AND COUNSELING

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

### Counselor Education (COUN) (Special course fees may apply.)

- **4801-3. Special Topics Workshop** Study of selected professional topics. May not be used to satisfy any degree requirements. May be repeated for credit. (D)

### Psychology (PSY)

- **2013. Introduction to Psychology** Study of the important scientific principles of individual human behavior from biological, cognitive, social, and behavioral perspectives. (F, S, SU)
- **2023. Contemporary Psychology** Study of the nature of modern scientific psychology and its application to selected topics and issues of contemporary interest. Prerequisite: PSY 2013 or permission of instructor. (F, S, SU)
- **3101. Laboratory for Quantitative Methods** Laboratory associated with PSY 3103. Two hours per week. Corequisite: PSY 3103. (F, S, SU)
- **3103. Quantitative Methods for Behavioral Sciences** Introduction to basic statistical techniques and methodology applicable to research problems in the behavioral sciences. Prerequisite: Three hours of mathematics or permission of instructor. Corequisite: PSY 3101. (F, S, SU)
- **3121. Laboratory for Experimental Psychology** Laboratory associated with PSY 3123. Two hours per week. Corequisite: PSY 3123. (S, F -odd)
- **3123. Experimental Psychology** Introduction to experimental methods in the study of behavior. Designed to acquaint the student with the principles of experimental design and research techniques. Prerequisite: Three hours of statistics or permission of instructor. Corequisite: PSY 3121. (S, F -odd)
- **3153. Human Research** Introductory course to familiarize students with the various data collection techniques used by psychologists to increase understanding of human behavior. Special emphasis on procedural and ethical problems inherent in research using humans as subjects. (F, S)
- **3303. Motivation** Survey of animal and human research in motivation. Topics include instincts, biological drives, acquired drives, incentive, secondary reinforcement, frustration, and theories of motivation. (F, S)
4013. Curriculum and Assessment Instructional Theory and Practice
Course focuses on current theory and practice for instructional techniques and fundamentals of educational measurement as they apply to classroom situations. This course is a co-requisite to the TI.4826 Teaching Internship in the Secondary School.

4253. Personality Development
The study of behavioral adaptation at the level of the individual. Includes empirical and theoretical issues related to classical and instrumental conditioning, complex learning, memory, and the neural bases of learning and memory. Human and infrahuman data are considered. (F)

4343. Learning Processes
The study of behavioral adaptation at the level of the individual. Includes empirical and theoretical issues related to classical and instrumental conditioning, complex learning, memory, and the neural bases of learning and memory. Human and infrahuman data are considered. (F)

4363. Cognitive Psychology
The study of human thinking, emphasizing empirical knowledge on processes involved in information processing, memory, knowledge representation, language, and problem solving. (S)

4543. Personality Development
Principles of development and organization of personality, with emphasis on influencing agents. (F, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
3643. The Exceptional Student in the Regular Classroom  Introduction to exceptional students, with the major focus on serving these individuals in regular education environments. (F, S, SU)

4033. Behavior Intervention and Consultation  Techniques of systematic behavioral analysis, prevention, and intervention for students at-risk for school failure or students with disabilities. Emphasis is placed on both direct and consultative interventions. (F, S, SU)

4043. Educational Diagnosis and Assessment in Special Education  A study of the principles and practices for assessment and identification of individuals with disabilities. Administration of formal and informal assessment instruments, and interpretation and reporting of assessment data is emphasized. Prerequisite: SE 3023. (F, SU)

4053. Educational Procedures for Individuals with Mild Disabilities  A study of models for the planning and delivering of instruction to students with disabilities who require an individualized general curriculum. Includes techniques and materials for teaching reading, math and writing. Prerequisites: ELSE 3643 or equivalent. (S)

4093. Working with Young Children in Inclusive Settings  The purpose of this course is to provide the teacher with knowledge of current theories, “best practices,” and strategies relevant to working with children from birth to 8 years of age who have special needs.

4603. Secondary Curriculum and Career Development for Individuals with Mild Disabilities*  In-depth study designed to develop knowledge and understanding of the pre-vocational and vocational curricula and programs for individuals with mild disabilities. Principles for providing occupational orientation and work experiences, and techniques of curriculum planning, program planning, materials and management will be included. (F, S)

4623. Diagnostic and Corrective Mathematics Instruction in Special Education  Developing a comprehensive perspective of diagnostic and corrective mathematics needs of students with mild disabilities. Emphasis will stress concept and skill development. (F, SU)

4633. Diagnostic and Corrective Reading Instruction in Special Education  Developing a comprehensive understanding of diagnostic and corrective needs of students with reading disabilities in resource and self-contained classrooms. Prerequisite: Admission into the Teacher Education Program (S, SU)

4683. Methods for Working with Families  Knowledge of family systems theory and the impact which a disability may have on the family system, awareness of family support and community resources; skills for effective communication, conferences, and collaboration. Development of effective interpersonal communicative skills; conducting conferences; designing training programs for families. (S, SU)

4703. Identification, Nature, and Needs for the Gifted, Talented, and Creative  A comprehensive study of methods for identifying gifted, talented, and creative students. Includes characteristics and educational and social needs of this population in a variety of educational settings. (S)

4713. Educational Procedures and Materials for the Gifted, Talented, and Creative  Focus is on current theory and practice in planning educational programs for gifted, talented, and creative students. Prerequisite: SE 4703. (SU)

4723. Assessment for Programming for Gifted, Talented, and Creative  Instruments will be reviewed for the purpose of preliminary screening and to provide differentiated programming for gifted, talented, and creative. (S)

4733. Gifted, Talented, and Creative Children in the Regular Classroom  A study to facilitate the education of regular classroom teachers as they strive to assist in the identification of gifted, talented, and creative students and to further enhance the education of these students while in the regular classroom. Includes specific areas of giftedness pertaining to characteristics, identification, and differentiated instruction. (D)

4816. Teaching Internship in Special Education  Culmination of the early childhood dual certification program. Provides directed teaching under the supervision of a qualified teacher. Requires application of knowledge skills, and demonstration of appropriate dispositions for teaching.* (F, S)

*Screening into teacher education program required.

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, AND SPORT SCIENCES

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Athletic Training (AT)

2203. Emergency Management in Athletic Training  The study and application of emergency management techniques in dealing with trauma resulting from injuries and illnesses suffered by an athletic population. Prerequisites: ZOOL 2001, ZOOL 2003, ZOOL 2011, ZOOL 2013, AT 2883. (S)

2731. Laboratory for Care and Prevention of Athletic Injuries  A laboratory course offered concurrently with AT 2733 emphasizing the practical aspects of taping, wrapping, and injury assessment. Prerequisite: ZOOL 2001, ZOOL 2003, ZOOL 2011, ZOOL 2013. Corequisite: AT 2733. (S)

2733. Care and Prevention of Athletic Injuries  A course designed to introduce athletic training students to current principles and practices in the prevention, recognition, and management of athletic related injuries and illnesses. Prerequisite: ZOOL 2001 and ZOOL 2003, ZOOL 2011, ZOOL 2013. (F, S, SU)

2883. Foundations of Athletic Training  Course designed to introduce the prospective athletic training major to the mission, philosophy and objectives of the ASU Athletic Training Program, the role of the certified athletic trainer and the relationship of athletic training to the U.S. health care system. Areas of emphasis include history, scope of practice, current professional literature and career opportunities. Prerequisite: AT 2733. Corequisite: AT 2731. (S)

3101. Clinical Instruction in Athletic Training I  This course is designed to instruct students in athletic training clinical proficiencies prior to practicing those proficiencies during a clinical experience. For Athletic Training Majors Only. Prerequisite: Admission to the Athletic Training Program. Corequisite: AT 3111. (F)

3111. Clinical Experience in Athletic Training I  This course provides a proficiency based supervised practical experience in athletic training required for certification by the NATA/BOC. For Athletic Training Majors Only. (Special course fee: $17.50). Prerequisite: Admission to the Athletic Training Program. Corequisite: AT 3101. (F)

3201. Clinical Instruction in Athletic Training II  This course is designed to instruct students in athletic training clinical proficiencies prior to practicing those proficiencies during a clinical experience. For Athletic Training Majors Only. Prerequisites: AT 3101, AT 3111. Corequisite: AT 3211. (S)

See the ASU web page (www.astate.edu) for current bulletin information.
3211. Clinical Experience in Athletic Training II This course provides a proficiency based supervised practical experience in athletic training required for certification by the NATA. For Athletic Training Majors Only. Prerequisite: AT 3101, AT 3211. Corequisite: AT 3201. (S)

3731. Laboratory for Advanced Assessment of Athletic Injuries A laboratory course offered concurrently with AT 3733 in which students practice the advanced skills necessary to evaluate athletic related injuries and illnesses. Prerequisites: AT 2731 and AT 2733. Corequisite: AT 3731. (S)

3733. Advanced Assessment of Athletic Injuries Advanced course designed to develop further knowledge and skills related to the recognition, assessment, treatment, and appropriate medical referral of athletic injuries and illnesses. Prerequisites: AT 2731 and AT 2733. Corequisite: AT 3731. (S)

3741. Laboratory for Therapeutic Exercise A laboratory course offered concurrently with AT 3743 where students will practice the advanced skills necessary to rehabilitate athletic related injuries using therapeutic exercise techniques. Prerequisites: AT 3731 and AT 3733. Corequisite: AT 3743. (F)

3743. Therapeutic Exercise A study of clinical sports therapy techniques used in the rehabilitation and reconditioning of athletic related injuries. Includes goniometry, manual muscle testing, therapeutic and resistance exercises and proprioceptive neuromuscular facilitation. Prerequisites: AT 3731 and AT 3733. Corequisite: AT 3741. (F)

3793. Gross Anatomy for Athletic Trainers Study designed to expose the student to the macroscopic aspects of human morphology. Cadaver lab will be correlated with surface anatomy, and other clinical information. Emphasis will be on musculoskeletal and neuromuscular systems. For Athletic Training students Only. Prerequisites: ZOOL 2001, ZOOL 2003, ZOOL 2011 and ZOOL 2013. (D)

3831. Laboratory for Therapeutic Modalities A laboratory course offered concurrently with AT 3833 in which students practice the skills necessary for the proper application of therapeutic modalities in the treatment of athletic related injuries. Prerequisites: AT 2731 and AT 2733; PHYS 2054 or PHYS 2133. Corequisite: AT 3833. (F)

3833. Therapeutic Modalities A study of current theory and application in the use of therapeutic modalities in the athletic training setting. Emphasis will be placed on thermal, electrotherapeutic and hydrotherapeutic modalities. Prerequisites: AT 2731 and AT 2733; PHYS 2054 or PHYS 2133. Corequisite: AT 3831. (F)

4101. Clinical Instruction in Athletic Training III This course is designed to instruct students in athletic training clinical proficiencies prior to practicing those proficiencies during a clinical experience. For Athletic Training Majors Only. Prerequisites: AT 3201, AT 3211. Corequisite: AT 4111. (F)

4111. Clinical Experience in Athletic Training III This course provides a proficiency based supervised practical experience in athletic training required for certification by the NATA. For Athletic Training Majors Only. (Special course fee: $17.50). Prerequisite: AT 3201, AT 3211. Corequisite: AT 4101. (F)

4201. Clinical Instruction in Athletic Training IV This course is designed to instruct students in athletic training clinical proficiencies prior to practicing those proficiencies during a clinical experience. For Athletic Training Majors Only. Prerequisites: AT 4101, AT 4111. Corequisite: AT 4211. (S)

4211. Clinical Experience in Athletic Training IV This course provides a proficiency based supervised practical experience in athletic training required for certification by the NATA. For Athletic Training Majors Only. Prerequisite: AT 4101, AT 4111. Corequisite: AT 4201. (S)

4723. Athletic Training Administration A study of the standards, policies and practices in the organization, supervision and administration of athletic training programs. Emphasis will be placed upon planning, developing, organizing and directing an athletic training program in a variety of sports medicine settings. Prerequisites: AT 2731, AT 2733. (F)

4733. Legal and Ethical Aspects of Athletic Training The study of the legal and ethical aspects of the athletic training profession. Emphasis will be placed on the legal and ethical parameters which define the proper role of certified athletic trainers and current medicolegal issues which affect the sports medicine professional. Prerequisites: AT 4723. (D)

4743. Athletic Training Seminar This course is designed for senior students in athletic training for the advanced study and discussion of specialized topics and contemporary issues related to the field of athletic training. Emphasis will be placed on professional development and employment preparation. Athletic Training students Only. Prerequisite: AT 4723. (S)

Driver Education (DRED)

4263. Basic Driver Education Instruction and application in the knowledge, skills, and attitudes needed for teaching safe driving. For certification in driver and traffic education. This is not a learn-to-drive course. (F, SU)

4273. Advanced Driver Education Driver and traffic education with emphasis on advanced instruction and research in driver education. Prerequisite: DRED 4263.

Exercise Science (ES)

2883. Foundations of Exercise Science An introductory course designed to examine the philosophical, historical, and psychosocial origin of the field of exercise science. Current issues and future directions will also be explored. (F)

3543. Human Anatomy and Anatomic Fundamentals of Motion Analysis of the parts of the human body and their position, structure, and functions as related to human motion. (Cross listed as HLTH 3543) (F, S, SU)

3553. Basic Physiology of Activity A basic study of the organs and systems of the human body, with particular emphasis on the effects of physical activity on the functioning of the systems. (Cross listed as HLTH 3553) (F, S, SU)

3623. Techniques of Physiological Fitness Assessment Study of graded exercise testing in the evaluation of functional work capacity. Testing modalities will include: treadmill, bicycle ergometer, bench or step testing, and field testing. Prerequisite: HLTH 3553 or Corequisite: PE 3713. (F, S)

3633. Nutrition for Health, Sport and Exercise Provides the student with information about nutrition as it pertains to health, sport, and exercise. (S)

3653. Techniques of Aerobic Conditioning Principles and methods of exercise leadership. Includes exercise programming and participation, teaching methods, technical evaluation, supervision, and leadership for various types of group aerobic exercise programs including field, gymnasium and aquatic exercise. Prerequisite: ES 3543 and 3553. (S)

3713. Cardiovascular Physiology This course is designed to introduce the student to the study of cardiovascular physiology with an emphasis on normal versus abnormal function. It provides an in-depth study of the cardiovascular system and its various responses to acute and chronic exercise. Prerequisites: ZOOL 2003, 2001, 2013, 2011, HLTH 3553. (S)

3743. Research and Statistical Methods in Exercise Science Fundamental aspects of the clinical research process involving human subjects. The course will include an overview of the research process, procedures, sampling data collection and analysis. (F, S)
4673. Exercise Prescription for Special Populations Provide the students with principles and practice in developing exercise regimens and programs specifically designed for special populations. (S)

4683. Exercise Prescription and Fitness Programming The application of basic physiological principles in the prescription of exercise and the administration of conditioning programs for individuals of differing ages, health status, and occupational status. Prerequisite: H 3533. (F)

4693. Techniques of Strength Training and Conditioning The study of current principles and procedures essential to strength training and conditioning practices. Emphasis is placed on the development and practical applications of aerobic conditioning, joint flexibility, and muscular strength, power and endurance programs. Prerequisites: HLTH 3543; HLTH 3553. (S)


4843. Practicum/Pre-internship Introduction to field experience in exercise science in order to become familiar with the operational and procedural aspects of clinically-based exercise facilities. Prerequisite: ES 3623, ES 3653, ES 3713, ES 4673, ES 4673, ES 4683, ES 4693, HLTH 4623. (F)

4913. Applied Motor Learning The study and practical applications of relevant motor learning theories and research related to exercise science, physical education, and sport programs. (F)

4963. Internship in Exercise Science This course is designed to provide a culminating experience for students in the Exercise Science program. Senior students will have an opportunity to apply skills learned in the curriculum in clinical, community and corporate settings. Two hundred forty contact hours are required at the internship site. Prerequisites: Completion of 100 semester hours of course work including all Exercise Science required courses and a 2.0 overall GPA with a “C” or better in all required courses. (Special course fee: $17.50). (F, S, SU)

4973. Internship in Exercise Science This course is designed to provide a culminating experience for students in the Exercise Science program. Senior students will have an opportunity to apply skills learned in the curriculum in clinical, community and corporate settings. Two hundred forty contact hours are required at the internship site. Prerequisites: Completion of 100 semester hours of course work including all Exercise Science required courses and a 2.0 overall GPA with a “C” or better in all required courses. (Special course fee: $17.50). (F, S, SU)

4996. Internship in Exercise Science This course is designed to provide a culminating experience for students in the Exercise Science program. Senior students will have an opportunity to apply skills learned in the curriculum in clinical, community and corporate settings. Two hundred forty contact hours are required at the internship site. Prerequisites: Completion of 100 semester hours of course work including all Exercise Science required courses and a 2.0 overall GPA with a “C” or better in all required courses. (Special course fee: $17.50). (F, S, SU)

Health (HLTH)

2513. Principles of Personal Health Principles, problems, and practices in the development of positive health behavior. (F, S, SU)

2523. First Aid and Safety Fundamentals, techniques, and practices of Standard First Aid and CPR as prescribed by the National Safety Council. Emphasis on programs of accident prevention in schools, homes, recreational areas; traffic safety. (F, S, SU)

2883. Foundations of Health Education This course will provide the scientific basis for conceptualizing and designing health education programs that are relevant, practical, and effective. (S)

3523. Public and Community Health Examination of public and community health problems, their causes, and possible solutions from a local, state, national, and international perspective. Roles of the individual and the community, and functions of the various agencies involved with health-related issues will also be studied. (F)

3543. Human Anatomy and Anatomic Fundamentals of Motion Analysis of the parts of the human body and their position, structure, and functions as related to human motion. (Cross listed as ES 3543) (F, S, SU)

3553. Basic Physiology of Activity A basic study of the organs and systems of the human body, with particular emphasis on the effects of physical activity of the functioning of the systems. (Cross listed as ES 3553) (F, S, SU)

3563. Human Sexuality Emphasis given to human reproduction, courtship, marriage, parenthood, premarital/extramarital sex, and deviate sexual behavior. (F, S, SU)

4513. Consumer Health An analysis of the health services and health products offered in the market place and study of principles involved in making wise consumer health choices. (SU)

4523. Current Issues in Health Current issues and trends in personal, public, and international health with stress on individual research and readings. (F)

4543. Drug Use and Abuse An exploration of the physical, mental, emotional, and social aspects of drug use and abuse. Special attention will be focused on proper use of drugs within contemporary society. (F, S, SU)

4573. The School Health Program The scope and function of the total school health program including common health problems, recommended program organization, and administrative practices. (F, S, SU -even)

4633. Health Promotion Assessment and Planning Designed to facilitate students’ understanding of the process of conducting needs assessments with various populations and to help students learn how to plan a well-designed program for implementation. (F)

4643. Health Promotion Implementation and Evaluation. Designed to facilitate students’ understanding of the process of program implementation and evaluation. Students will implement and evaluate various health interventions. Prerequisite: HLTH 4633. (S)

4801-3. Special Topics Workshop A specifically designed series of learning experiences to enhance the professional capabilities of teachers. Opportunity for participants to engage in meaningful learning activities and to interact with recognized professionals in the field. Course can be repeated for credit. (D)

4896. Internship in Health Promotion This course is designed to provide a culminating experience for students in the health promotion program. Senior students will have an opportunity to apply skills learned in the curriculum in clinical, community, corporate, and school settings. Two hundred forty contact hours are required at the internship site. Prerequisites: Formal application to the internship coordinator one semester prior to enrollment in the course. Completion of 100 semester hours of course work including all health care and required courses and a 2.0 overall GPA with a “C” or better in all health care and required courses. (Special course fee: $17.50). (F, S, SU)

Physical Education (PE)

1002. Concepts of Fitness Provides knowledge and appreciation of the importance of physical fitness for lifelong health, wellness, and a quality life; and opportunities for psychomotor development. (F, S, SU)

1011. Pilates and Fitness Yoga The principles and concepts of Pilates and Fitness Yoga in developing overall body flexibility, strength and endurance as well as enhancing good body posture. (F, SU)
111. Physical Conditioning  Basic conditioning. The course includes weight training, circuit training, cardiovascular and respiratory activity. (F, S, SU)

112. Figure Control  The principles and concepts of exercise as related to enhancement of personal appearance. (F, S)

113. Aerobic Exercise  Basic conditioning involving continuous rhythmical movement. Individualized fitness programs are developed for each student. (F, S)

114. Beginning Rugby  Introduction to the basic skills, rules, and strategy of rugby. (F)

121. Hiking/Backpacking  Introduction to basic skills and knowledge of first aid, land navigation, outdoor skills, and equipment necessary to participate in hiking/backpacking. One weekend field trip required. (F, S)

122. Rappelling and Rock Climbing  Introduces the student to the fundamentals of rappelling/rock-climbing equipment, terminology, techniques, and skills necessary to rock climb safely and successfully. Optional participation in one mountaineering field trip. (Special course fee: $25.00) (D)

123. Country-Western Dance  Beginning instruction in skills and techniques of Country-Western style dance steps. (F, S)

124. Fitness Walking  Fundamental techniques of and benefits derived from a regimented aerobic walking program. (F, S)

131. Beginning Swimming  Non-proficiency course designed to teach basic swimming skills for non-swimmers or beginning swimmers. (F, S)

132. Water Aerobics  Basic conditioning involving aquatic exercise, opportunity to develop and maintain fitness while enjoying water activities. (F, S)

141. Track and Field  Introduction to the fundamentals of track and field activities. (F, S)

142. Racquetball  Introduction to the basic skills, rules, and strategy in racquetball. (F, S, SU)

146. Archery  Introduction to fundamentals of recreational archery. (F, S, SU)

147. Bowling  Introduction to the basic techniques of bowling. (Special course fee: $25.00) (F, S)

148. Tennis  Introduction to the basic skills, rules, and strategy in tennis. (F, S, SU)

149. Badminton  Introduction to the basic skills, rules, and strategy in badminton. (F, S)

150. Golf  Introduction to the basic skills, rules, and strategy in golf. (F, S)

151. Gymnastics  Introduction to the basic skills in tumbling and apparatus. (F, S)

152. Trampoline  Instruction and practice in trampoline skills and routines. (D)

153. Fencing  Introduction to the basic skills, rules, and strategy of foil fencing. (D)

160. Soccer  Introduction to the basic skills, rules, and strategy in soccer. (F, S)

161. Basketball  Introduction to the basic skills, rules, and strategy of basketball. (F, S)

162. Volleyball  Introduction to the basic skills, rules, and strategy of volleyball. (F, S)

164. Flag/Touch Football  Introduction to the basic skills, rules, and strategy of flag/ touch football. (F, S)

165. Softball  Introduction to the basic skills, rules, and strategy of softball. (F, S)

180. International Folk Dance  Folk dances of various people throughout the world; understanding of basic terms and steps. (F)

189. American Square and Round Dance  Techniques and basics in square and round dancing. (S)

3752. Advanced Swimming and Lifeguarding  Development of swimming and opportunity for certification in lifeguarding. Prerequisite: Intermediate swimming skill.

3762. Aquatic Safety Instruction and Pool Management  Advanced aquatic techniques and management of aquatic facilities. Prerequisite: Intermediate swimming skill.

3782. Skin and Scuba Diving  Opportunity for Y.M.C.A. certification pending completion of specified requirements. Prerequisite: Consent of instructor. (Special course fee: $30.00) (F, S)

3792. Folk and Square Dancing  Study and practice of folk dances and characteristics of various countries, with emphasis on square dances and calling square dances. (D)

3802. Physical Education for Teachers of Young Children  The philosophy, aims, and objectives of physical education in the grades P-4; includes laboratory experiences. (F, S, SU)

3803. Physical Education for Elementary Grades  Designed to assist prospective elementary teachers in planning and conducting a well rounded program. Emphasis is placed on proper selection of activities, program organization, and teaching procedures. Provision is made for the student to get some experience working with children.

3813. Concepts of Athletic Training  A course designed for physical educators, coaches and students interested in the care of sports related injuries. (S, SU)

3823. Rhythmic Activities and Fundamental Movement for Elementary Grades  The values, scope, and analysis of rhythmic activities and basic movement experiences. Emphasis is given to teaching techniques and program progression. (F, S)

3832. Theory and Practice of Teaching Fitness Concepts  Instructional strategies designed to teach, develop and assess health-related fitness components for grades P-12. Prerequisite: PE 1002. (F, S)

3833. Sport Promotion and Marketing  Develop an understanding of theories and principles involved in marketing and promoting a program in sport, human performance and leisure studies. (F)

3842. Theory and Practice of Teaching Leisure Sports  Instructional strategies for teaching skill techniques, progression, and planning in selected leisure sport activities (archery, bowling, golf, table tennis) for students in grades P-12. (F, S)

3862. Theory and Practice of Teaching Racket Sports  Instructional strategies for teaching skill techniques, progression, and planning in selected racket sports (badminton, racquetball, pickleball, and tennis) for students in grades P-12. (F, S)
3863. Economic and Financial Management for Sport Organizations  Financial concepts and theories and their application in the professional, intercollegiate, and commercial sport industries. Prerequisite: FIN 3713. (F)

3872. Rules and Officiating  A study of rules and techniques in officiating the following sports: baseball/softball, basketball, football/touch football, soccer, track and field, and volleyball. (F, S)

3873. Facility and Event Management  Principles and practices for operating athletic centers and recreational facilities. (S)

3892. Theory and Practice of Teaching Team Sports  Skill techniques, progression, and planning for instruction in basketball, flag/touch football, soccer, softball, and volleyball for students in grades P-12. (F, S)

3893. Sports in America  An overview of the impact and significance of play and sports as a social institution. (F)

4663. Motor Skills Development for Children  Appropriate content and skill performance levels in basic game skills and gymnastics for grades K-6. (S)

4703. Adaptive Physical Education  Enables the prospective teacher to: (a) understand the value of physical education for students with disabilities; (b) plan programs designed to assist students with physical, mental, and emotional disabilities in developing their maximum potential through physical activity. (F)

4711-3. Independent Study  Student may engage in supervised study of physical education issues. (D)

4743. Legal Issues in Sport  Legal issues as it relates to the law, liability, legal systems and the rights of those involved in the sport, exercise, and the fitness industry. (F)

4753. The Physical Education Curriculum  The course is designed to prepare prospective teachers to develop, implement, and assess the curricula within physical education. (F)

4773. Organization and Management of Sports Programs  Planning, organizing, leading, and evaluating of institutional and community sports programs. (S)

4783. Organization and Administration of Physical Education  Problems relating to the planning and management of physical education programs in the public school. (F, S)

4793. Evaluation in Physical Education  Tests and evaluation procedures in the areas of physical fitness, motor ability, skill, and knowledge. Emphasis is placed on the administration of tests and use of results. (S)

4801-3. Special Topics Workshop  A specifically designed series of learning experiences to enhance the professional capabilities of teachers. Participants engage in meaningful learning activities and interact with recognized professionals in the field. May not be used to satisfy any degree requirements. May be repeated for credit. (D)

4822. Theory and Practice of Coaching Football  Team offenses and defenses, playing strategy, rules, scouting, and conditioning of players are discussed. Practice in basic fundamentals. (F)

4832. Theory and Practice of Coaching Basketball  Class follows same pattern as described in 4822 above. (S)

4842. Theory and Practice of Coaching Track  Instruction and practice in performing track events with emphasis on teaching techniques; also practicum in conducting competitive meets. (S)

4843. Philosophy and Ethics in Sport  An exploration of major issues, ethical theories, moral reasoning and their impact on the operation of programs in sport, physical education, fitness, athletics, and recreation. (S)

4852. Theory and Practice of Coaching Baseball  Class follows same pattern as described in 4822 above. (F)

4853. Applied Psychology of Sport and Exercise  The study and practical applications of relevant psychological theories and research related to physical education, exercise, and sport programs. (S)

4862. Theory and Practice of Coaching Gymnastics  Instruction and practice in performing gymnastic events with emphasis on teaching techniques; also practicum in conducting competitive meets. (D)

4863. Internship in Physical Education I  Provides practical off-campus experience related to the student's major option. (Prerequisite: formal application to the internship coordinator one semester prior to enrollment in the course, completion of 100 hours including all required courses, 2.0 GPA, "C" or better in all emphasis area and core Physical Education courses, for B.S. in Physical Education majors only) (Special course fee: $17.50) (F, S, SU)

4872. Theory and Practice of Coaching Volleyball  Class follows same pattern as described in 4822 above. (F)

4873. Organization and Administration of Interscholastic Athletics  A detailed study of problems encountered by coaches in planning and managing athletic contests; includes coaching psychology. (S, SU)

4882. Theory and Practice of Coaching Soccer  This course is designed to provide prospective athletic coaches with knowledge and skill introduction regarding the game of soccer. (S, SU)

4883. Practicum in Elementary Physical Education  Experience in working with elementary children, including planning and implementing the program. Requires 90 hours of direct contact with elementary age children. Prerequisites: Admission to Teacher Education Program and completion of 75 hours including PE 3803, 3823, and 4663. (Special course fee: $17.50) (SU)

4893. Internship in Physical Education II  Provides practical off-campus experience related to the student's major option. (Prerequisites: formal application to the internship coordinator one semester prior to enrollment in the course, completion of 100 hours including all required courses, 2.0 GPA, "C" or better in all emphasis area and Generic Physical Education courses, for B.S. in Physical Education majors only) (Insurance fee:$17.50). (F, S, SU)

4896. Internship in Physical Education  Provides practical off-campus experience related to the student's major option. (Prerequisites: formal application to the internship coordinator one semester prior to enrollment in the course, completion of 100 hours including all required courses, 2.0 GPA, "C" or better in all emphasis area and Generic Physical Education courses, for B.S. in Physical Education majors only.) (Special course fee: $17.50) (F, S, SU)

DEPARTMENT OF TEACHER EDUCATION

Secondary Education (SCED)

Prerequisite: Admission into Teacher Education Program

2514. Introduction to Secondary Teaching  Introduces prospective educators to the historical, philosophical, political, and technological factors affecting American education. Includes thirty clock hours of field/campus-based experiences. Prerequisite: Fifteen semester hours of college credit. (F, S)

See the ASU web page (www.astate.edu) for current bulletin information.
3515. Performance-Based Instructional Design* Performance based instructional procedures and techniques for secondary education majors. Application of various teaching models and appropriate classroom management techniques will be emphasized. Reflective journals, application of technology, micro teaching and field experiences will be required. Prerequisite: SCED 2514. (F, S)

4713. Educational Measurement with Computer Applications* Students will learn to: (1) construct, administer, and interpret tests and rating scales to measure student achievement and performance; and (2) use the computer to assess, record, and report student achievement and performance. (F, S)

4813. On-The-Job Teacher Training Practicum A year-long on-the-job teacher training practicum, jointly supervised by designated public school and university personnel. Prerequisite: For teachers entering by the probationary route. (D)

Secondary Teaching Methods (ED __ __)

*Prerequisite: Admission into Teacher Education Program

EDAR 4523. (SCED 4523) Methods and Materials for Teaching Art* Emphasis on the practical application of art in the secondary school. Techniques and strategies of teaching art, developing an art curriculum, assessing and motivating students. (F)

EDBU 4533. (SCED 4533) Methods and Materials in Teaching Business Technology Study of the role and scope of the vocational business education teacher; professional organizations, professional ethics, federal involvement, and professional literature. Emphasis on the assessment of student competencies, competency-based programs, resources, facilities, and curriculum development. Selection and practice in teaching techniques and strategies. (F)

EDHE 4533. Strategies for Teaching Health Education Theory and teaching strategies for effective health instruction. (S, SU -odd)

EDSP 4543. (SCED 4543) Methods and Materials for Teaching Speech Communication and Theatre in the Secondary School* Methods and resources for teaching speech communication in the secondary schools. Emphasis on the teaching strategies for interpersonal communication, group dynamics, and critical thinking and reasoning. The development of a speech communication resource notebook and the study of selected curriculum guides. (F)

EDEN 4553. (SCED 4553) Methods and Materials for Teaching English in the Secondary School* The study of models of teaching and instruction and of assumptions underlying current teaching-learning practices for English in the secondary schools. Opportunities to develop skills and strategies for teaching language, literature, and composition to culturally diverse students. (F)

EDMA 4563. (SCED 4563) Methods and Materials for Teaching Mathematics in the Secondary School* Systematic application of a variety of activities to facilitate the development of competent mathematics teachers. Development and implementation of instructional strategies for teaching mathematics, explicating types of knowledge and the ways they can be taught. (S)

EDMU 4573. (SCED 4573) Methods and Materials for Teaching Instrumental Music* Overview of the music curriculum K-12. Emphasis on teaching strategies in incorporating cognitive, psychomotor, and affective techniques appropriate to secondary school students. Opportunities to develop behavioral objectives, present demonstrations, plan rehearsals, and more. (F)

EDPE 4583. (SCED 4583) Methods and Materials for Teaching Physical Education in the Secondary School* Assists the student to assimilate new and previously learned material prior to the internship experience. Special emphasis on PRAXIS II, goal development, teaching styles, methods, and problems encountered by beginning physical education teachers. (F, S)

EDSC 4593. (SCED 4593) Methods and Materials for Teaching Science in the Secondary School* Philosophical bases, teaching techniques, curriculum development, classroom management, facility resources, and equipment are emphasized. (F, S)

EDSS 4603. (SCED 4603) Methods and Materials for Teaching Social Studies in the Secondary School* Historical and current trends in teaching social studies at the secondary school level. Major emphasis on content and concept development and their application in the social studies classroom. Practice in writing objectives, applying teaching techniques, and formulating student evaluations. (F, S)

EDAG 4623. (SCED 4624) Special Methods for Teaching Agricultural Education* Overview of major components of an efficient agriculture department at the secondary school level. Emphasis on teaching methods and materials required for the agriculture classroom and mechanics laboratory. Opportunities for course planning, classroom management, record development, and career orientation. (S)

EDLA 4633. (SCED 4633) Methods and Materials for Teaching Foreign Languages in the Secondary School* Knowledge and practice of instructional strategies and techniques associated with a proficiency-based approach to foreign language teaching. Study of the theoretical bases of language learning and acquisition, innovations in curricula, resources, materials, and technology. (F)

EDMU 4643. (SCED 4643) Methods and Materials for Teaching Vocal Music An overview of the music curriculum, K-12. Emphasis on teaching techniques incorporating cognitive, psychomotor, and affective techniques appropriate to secondary school students in vocal music. Opportunities to develop behavioral objectives, demonstrations, plan rehearsals, and more. (S)

EDEN 4653. (SCED 4653) Methods and Materials for Teaching English in the Middle School* Methods and materials for teaching English to the special needs of middle school students. Focus on the application of techniques and strategies for teaching language, literature, and composition to culturally diverse students. (S -even)

EDSS 4663. (SCED 4663) Methods and Materials for Teaching Social Studies in the Middle School* Methods, materials and activities directed to promote effective instructional procedures for the middle school social studies classroom. Emphasis on the identification, demonstration, development, and evaluation of appropriate social studies strategies. (D)

Teaching Internship (TI __ __)

TIAG, TIAS, TIBI, TIBU, TICH, TIEN, TIHI, TILA, TIMA, TIMU, TIPE, TIPH, TISP 4826. (SCED 4826) Teaching Internship in the Secondary School (12 semester hours)* Full semester teaching internship. (F, S)

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.
Early Childhood Education (ECH)

Prerequisite: Admission into Teacher Education Program

2002. Introduction to Education Technology Introduction to the use of technology in an educational setting, including system operations. This course is a co-requisite to ELED 2202, prerequisite to MLED 3603 and screening into the Teacher Education P-4 program. (F,S)

2013. Survey of Early Childhood Education Focuses on historical and philosophical foundations, current and legal issues, program models and settings and how to apply appropriate strategies to early childhood education programs. (7 clock hours of required observation.) (F,S)

2022. Introduction to Teaching: Field Experiences I Purposes and functions of the elementary school and its personnel. Assistance provided with career choices in the field of elementary education (30 clock hours of elementary classroom observation and directed assignments required) Prerequisite: 15 semester hours. (F, S)

2023. Child Development Study of relevant child development data, encompassing development from conception to the middle childhood years. Practical application of theory is provided through a variety of hands-on experiences and observations. (2 clock hours of experience with children, as identified by instructors). (F, S, SU)

3013. Children’s Literature in the Preschool and Primary Grades* Introduces trade books currently available for young children and the role literature plays in their literacy development. (5 clock hours of field experience in preschool through 4th grade settings). Prerequisites: ECH 2012, ECH 2023. (F, S, SU)

3033. Effective Teaching Strategies* Develops an understanding of effective instructional practices; provides experience in basic instructional planning and delivery; and assists in developing a variety of instructional approaches. (5 clock hours of field experience and microteaching required). Prerequisite: ELED 3063.

3043. Program Development and Management for Early Care and Education Centers* Provides students with knowledge and skills to develop and manage early childhood programs focusing on the care and education of infants and toddlers. (5 clock hours of field experience required). Prerequisites: ECH 2012, ECH 2023, ECH 3003, ECH 3013, ELED 3063, ELED 4003, RDNG 3203, Co-requisites: ECH 3063, ECH 3073. (F, S)

3053. Curriculum Development in Early Childhood Education* Provides students with opportunities to develop and implement appropriate curriculum experiences in the preschool and kindergarten setting. (7 clock hours of field work in the P-3 settings.) Prerequisites: ECH 2012, ECH 2023, ECH 3013, ELED 3063, RDNG 3203, ECH 3003. (F, S, SU)

3063. Individualizing Programs for Children and Families Methods for individualizing programs for young children and their families, based upon individual strengths and needs. (6 clock hours of observation required.) Prerequisites: ECH 2012, ECH 2023, ECH 3003, ECH 3013, ELED 3063, ELED 4003, RDNG 3203, SE 3643. Co-requisites: ECH 3043, ECH 3073. (F, S)

3073. Children, Families, and Community Relationships: Field Experiences II* Requires performance of skills and strategies for developing positive relationships with children and families and provides opportunities for interaction with community resources. (A minimum 50 clock hours of field experience with infants, toddlers and preschoolers and 25 hours with agencies) Prerequisites: ECH 2012, ECH 3003, ECH 3013, ELED 3063, ELED 4003, RDNG 3203. Co-requisites: ECH 3043, ECH 3063. (F, S)

3083. Integration of Technology into the Curriculum* Teaches pre-service teachers in the early childhood and mid-level programs how to integrate educational technology into the classroom curriculum. Prerequisite: ECH 2002. (F, S, SU)

3603. Literacy for Children and Families Provides students with knowledge of literacy development at birth, and methods to involve families in the literacy process. Six clock hours of observation is required with infants, toddlers, and preschoolers. Prerequisites: ECH 2013, 2023. (S)

3613. Strategies for Supporting Learning Through Play Emphasizes the role of play in the development and learning of typically and atypically developing children, play as a mode to understand children, and strategies to use play to support the learning and development of children. 10 clock hours of Field Experience required. Prerequisites: ECH 2012, ECH 2023. (S)

4012. Organizing and Managing the Learning Environment Techniques of classroom management, theories of discipline, and positive behavior guidance. (F, S, SU)

4013. Field Experience III: Pre-Internship Observing, teaching, evaluating curriculum and materials, managing classrooms, and addressing children’s diverse needs and learning strategies. (240 clock hours of field experiences required.) Prerequisites: RDNG 3203, ECH 3023, ECH 3033, ECH 3053. Co-requisites: RDNG 4403, ECH 4012, ECH 4023, ECH 4043. (F, S)

4023. Methods and Materials of Language Arts and Social Studies in Early Childhood Methods for teaching language arts and social studies and the integration of these subjects across the curriculum. (3 clock hours of field experience.) Prerequisites: ELED 3033, ELED 4003, ECH 3043, ECH 3053, ECH 3063, ECH 3073. (F, S, SU)

4043. Methods and Materials of Math and Science in Early Childhood Acquaints preservice teachers with the scientific/mathematic process skills. Emphasis placed on three types of learning: naturalistic, informal, and structured. Also the interrelatedness of math/science. (3 clock hours of field experience.) Prerequisites: ELED 3033, ELED 4003, ECH 3043, ECH 3053, ECH 3063, ECH 3073. (F, S, SU)

4053. Today’s Families: Interdisciplinary Approaches An interdisciplinary course designed to promote a critical approach to examining the family and its role in society. Prerequisite: 12 hours of coursework in Interdisciplinary Family Minor OR Instructor’s Permission

4061. Early Childhood Education Symposium A symposium with an identified theme related to current events or needs in the field of early childhood education. Designed for early childhood professionals. (May be repeated.) (SU)

4086. Teaching Internship in Early Childhood Education—Kindergarten (6 semester hours)* Prerequisite: Admission to the internship semester as specified by the Office of Professional Programs of the College of Education. (F, S)

4096. Teaching Internship in Early Childhood Education—Primary Grades 1-3 (6 semester hours)* Prerequisite: Admission to the internship semester as specified by the Office of Professional Programs of the College of Education. (F, S)

4603. Physical and Psychological Environments for Young Children Explores the physical and psychological environments needed to support development of the whole child. Includes health, safety, nutrition, physical arrangements and space, communication, guidance and group management. 10 clock hours of Field Experience required. Prerequisites: ECH 3603, ECH 3613, Co-requisite: ECH 4613. (F)

4613. Curriculum and Assessment for Early Care and Education Develops knowledge for assessing children and implementing appropriate curriculum for young children. Includes study of the curriculum, integrated units, observational methods and self-assessment. 10 clock hours of Field Experience required. Prerequisites: ECH 3603, ECH 3613, Corequisite: ECH 4603. (F)
4623. Child Care Program Management and Mentoring  
Introduction to basic management and administration of child care programs, including programs for out-of-school time of elementary grade children. Includes policies, procedures, staff supervision/mentoring, funding, finances, licensing, and curriculum implementation. Emphasis on professional development, including ethics and advocacy. Prerequisites: ECH 4603, ECH 4613. (S)

4636. Practicum in Early Care and Education  
Students observe and effectively participate in a group setting for young children for extended periods of time, increasingly responsible for all aspects of the group. This course includes a seminar which will focus upon professionalism. Prerequisites: ECH 4623. (SU)

480V. Special Topics  
Current subjects of interest in Early Childhood Education professionals with appropriate sub-titles.

Elementary Education (ELED) (Special course fees may apply.)

*Prerequisite: Admission into Teacher Education Program

1001. Introduction to Technology  
Designed to teach students the pre-requisite skills needed for ELED 3063, and for pre-service education students new to or unfamiliar with technology. (S, S, SU)

3003. Human Growth and Learning*  
Study of the nature and development of the child, including major theories of learning and learning processes. (4 clock hours of child study projects required) (F, S, SU)

4053. Teacher-Made Materials for Use in Learning and Interest Centers  
Applies philosophical and theoretical course content by demonstrating appropriate teaching devices and requiring students to develop materials essential to the functioning of the activity approach to curriculum. Prerequisite: 12 hours of coursework in interdisciplinary Family Minor OR instructor's permission. (SU)

4613. Techniques of Behavior Management  
Techniques of systematic behavioral intervention, including all areas of exceptionality in regular classes, special classes, itinerant and resource programs. Students must complete a fifteen (15) clock-hour case study/behavior management project. (Dual listing: see SE 4613). (SU)

480V. Special Topics  
Current subjects of interest to graduate/undergraduate Elementary Education, Early Childhood Education or other educational professionals with appropriate sub-titles. Course may include intensive study of subjects to meet the need of professional educators. All Special Topics Courses must be approved by the Elementary Education Department Curriculum Committee. May be taken for one, two or three credit hours (in any combination) for up to three hours of credit. Special Topics may be applied as elective credit toward a degree program with the written permission of the academic adviser or department chair prior to enrollment in the course.

Middle-Level Education (MLED)

2002. Introduction to Education Technology  
Introduction to the use of technology in an educational setting, including system operations. This course is a co-requisite to ELED 2202, pre-requisite to MLED 3063 and screening into the Teacher Education P-4 program.

2022. Introduction to Teaching  
Purposes and function of the elementary/middle school and its personnel. Assistance proved with career choices in the field of elementary/middle education (30 clock hours of elementary/middle classroom observation and directed assignments required). Prerequisite: 15 semester hours. (F, S)

3003. Nature and Needs of the Mid-Level Learner*  
Presents theories and research on the development and needs of the middle level learner. Includes examination of the physical, cognitive, emotional, moral, and social development of 9-15 year olds. (Three clock-hours of fieldwork are required.) (F, S, SU)

3013. Literacy Through Literature for the Middle Grades*  
Designed to assist pre-service teachers in becoming widely acquainted with the role literature plays in the continuing literacy development of mid-level students. Features current trade books and other literary forms. (Four clock-hours of fieldwork are required in middle-level classroom settings.) (F, S, SU)

3023. Assessing and Evaluating Student Behavior*  
Provides students with a set of measurement and evaluation skills. Attention will be focused on both standardized and teacher-constructed instruments.

3033. Effective Teaching Strategies*  
Develops an understanding of effective instructional practices; provides experience in basic instructional planning and delivery; and assists in developing a variety of instructional approaches. (5 clock hours of field experience and microteaching required). Prerequisite: ELED 3063 or MLED 3063. (F, S, SU)

3073. Key Issues of Teaching and Learning in the Middle Grades*  
Presents the current and emerging trends in middle grade curriculum development and instructional practices. (Ten clock-hours of fieldwork are required.) Prerequisites: MLED 3003, MLED 3033. (F, S, SU)

3083. Integration of Technology into the Curriculum*  
Teaches pre-service teachers in the middle-level programs how to integrate educational technology into the classroom curriculum. (Special course fee: $20.00)

4013. Methods and Materials for Teaching Language Arts and Social Studies in the Middle Grades*  
Methods course using language arts as an integrating factor in social studies content. Application of integrated teaching activities required. (Three clock-hours of fieldwork required.) Prerequisites: MLED 3073. (F, S, SU)

4023. Methods and Materials for Teaching Mathematics and Science in the Middle Grades*  
The course includes scientific and mathematical process skills, the interrelated nature of mathematics and science. (Three clock-hours of fieldwork is required.) Prerequisite: MLED 3073. (F, S, SU)

4034. Classroom Management and Curriculum Applications: Field Experience II*  
A study of classroom management techniques and instructional practices conducive to successfully addressing the middle level learner. (Sixty clock-hours of fieldwork are required.) Prerequisite: MLED 3073. (F, S, SU)

4063. Social Foundations of Education*  
Develops a basic understanding of the educational function in American society. Emphasis on the history, philosophy, and professional aspects of teaching. (F, S, SU)

4106. Teaching Internship in Middle Grades 4-5*  
Culmination of the mid-level education program. Provides eight weeks of directed teaching under the supervision of a qualified teacher. Requires application of knowledge, skills, and demonstration of appropriate dispositions for teaching. Prerequisite: Admission to the internship semester as specified by the Office of Professional Education Programs of the College of Education. (F, S)

4116. Teaching Internship in the Middle Grades 6-8*  
Culmination of the mid-level education program. Provides eight weeks of directed teaching under the supervision of a qualified teacher in an appropriate area of specialty. Requires application of knowledge, skills, and demonstration of appropriate dispositions for teaching. Prerequisite: Admission to the internship semester as specified by the Office of Professional Education Programs of the College of Education. (F, S)

See the ASU web page (www.astate.edu) for current bulletin information.
199198

Reading (RDNG)

*Prerequisite: Admission into Teacher Education Program

3003. Reading Acceleration  For students who have a need to develop efficiency in reading.

3203. Foundations of Reading Instruction*  Introductory course focusing on the theories of reading and the reading process, with an introduction to the history of reading instruction and approaches and materials for teaching reading. (F, S, SU)

4313. Methods and Materials in Reading  Focuses on techniques and materials for teaching students with different learning styles. Emphasis on the basal reader, whole language, linguistic, language experience, and individualized approaches. (F, SU)

4323. Clinical Problems in Reading*  Focuses on assessment, evaluation, and remediation of reading problems, utilizing an interdisciplinary approach. Prerequisite: RDNG 4303. (F, S)

4343. Reading in the Content Areas: Middle and Secondary Schools*  For classroom teachers, reading specialists, and other educators. Emphasis on the relationship between learning strategies and reading content materials in the subject areas normally taught in grades 4-12. Prerequisite: RDNG 3203. (F, SU)

4403. Early Literacy: Theory and Practice*  Students develop, implement, and assess the effectiveness of literacy lessons in K-4 classrooms. (45 clock hours of field experience.) Prerequisites: RDNG 3203 and ECH 3013. Co-requisite: ECH 4003. (F, SU)

4801-3. Special Topics

College of Engineering

Professor R. C. Clift, Interim Dean

One of the hallmarks of modern times is the acceptance of accelerating change, both in technological products and in educational philosophies. Few college graduates function today solely with the skills and understanding that they gained in formal degree programs. Recognizing that the undergraduates of Arkansas State University will pursue their careers in an ever changing world, the overall mission of the College of Engineering is to provide a broad education in the fundamentals of engineering and technology while providing opportunities for emphasis in specialized areas of study. An important corollary is the development of the ability to think logically, creatively, and quantitatively, and the skills necessary to effectively communicate both fundamental and applied knowledge. This unified approach provides an inherently flexible base that permits graduates to fill general or specialized positions in industry, government, and private practice or to pursue advanced degrees after graduation.

The College of Engineering is comprised of two academic programs: Engineering and Technology. The Engineering Program offers courses leading to the degree of Bachelor of Science in Engineering with professional concentrations in civil; electrical, computer, and information; or mechanical engineering. The Technology Program offers an Associate in Science degree with a major in Technology and a Bachelor of Science degree with a major in Technology. The engineering degree program is accredited under the General Basic-Level Criteria by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, Telephone: (410) 347-7700. The Technology degree programs are not accredited by ABET.

Engineering Program

Professor Engelken, Director of ECIE; Professor Parsons, Director of CE; Assistant Professor Edgar, Director of ME; Professor Gillanders; Associate Professors Mixon, Sherman; Assistant Professor Haran; Instructors Stewart, Walker, Wood

The engineering profession is concerned with the innovative, effective, and economic synthesis of ideas, materials, and personnel to create the products, systems, and services needed by society. The knowledge and skills that comprise modern engineering must be developed upon strong foundations of mathematics, the physical sciences, and applied engineering sciences. Because responsible engineering must contribute to the overall goals and values of our society, engineers must develop a basic knowledge and appreciation of mankind’s cultural and social history as well as ethical issues. Engineering must reflect an ever growing body of knowledge that includes state-of-the-art professional practice, understanding, and values which require a lifetime of continuing education. Therefore, the education needed to enter and practice the engineering profession is comprehensive and demanding regardless of the chosen engineering field.

PROGRAM EDUCATIONAL OBJECTIVES

The overall educational objectives of the Engineering Program at Arkansas State University are:

1. All engineering graduates will have a broad education in the fundamentals of engineering principles and professional practices that forms a strong, flexible base and enables them to fill a variety of responsible engineering positions.

2. Most graduates will have specialized training in one area of concentration that will enable them to successfully perform at entry-level engineering positions. Some graduates will prefer and be capable of continuing their education in graduate school.

The more specific objectives that reflect the desired outcomes or skills possessed by the engineering graduates are listed below. With respect to the first overall educational objective, all graduates of the Engineering Program will have:

1. All graduates of the Engineering Program will have:

   a. A broad education in the fundamentals of engineering principles and professional practices that forms a strong, flexible base that permits them to fill a variety of responsible engineering positions.

   b. The ability to think logically, creatively, and quantitatively, and the skills necessary to effectively communicate both fundamental and applied knowledge.

2. Most graduates will have specialized training in one area of concentration that will enable them to successfully perform at entry-level engineering positions.

   a. Knowledge and skills necessary to effectively communicate both fundamental and applied knowledge.

See the ASU web page (www.astate.edu) for current bulletin information.
3. An ability to function on multi-disciplinary teams;
4. An ability to identify, formulate, and solve engineering problems;
5. An understanding of professional and ethical responsibility;
6. An ability to communicate effectively, both orally and in writing;
7. The broad education necessary to understand the impact of engineering solutions in a global and societal context;
8. A recognition of the need for, and an ability to engage in, life-long learning; and
9. A knowledge of contemporary issues.

With respect to the second overall educational objective:
1. All graduates will have an ability to use the techniques, skills, and modern tools necessary for entry-level practice in their area of concentration;
2. All graduates will be able to analyze and design a system, component, or process to meet desired needs in their area of concentration; and
3. Some graduates will have developed the necessary skills and knowledge to be accepted and be successful in a graduate education program.

The engineering degree program is accredited by the Engineering Accreditation Commission of ABET, and thus, has established a system to determine and periodically evaluate the above educational objectives as necessary to satisfy constituent needs, to implement a curriculum and program as needed to achieve the educational objectives and desired outcomes, to provide ongoing evaluation and assessment that demonstrates achievement of these objectives and outcomes, and that uses the assessment results to improve the effectiveness of the program.

**BACHELOR OF SCIENCE IN ENGINEERING**

The Engineering Program curriculum is structured to give all students a working knowledge of the engineering sciences and a progressive level of understanding and participation in the overall design process. The Bachelor of Science in Engineering degree currently offers professional concentration electives in civil; electrical, computer, and information; and mechanical engineering; or an individually planned elective program that may combine or cut across traditional fields of engineering and applied sciences. All prerequisite engineering courses must be completed with a grade of "C" or better before attempting the subsequent engineering courses. In addition to the University requirements for all Baccalaureate Degrees, the Bachelor of Science in Engineering requires that one of the two following conditions be met: (1.) "C" or better in each course in the 43 hour concentration area or (2.) 2.5 or greater grade point average in the 43 hour concentration area.

Transfer credits are acceptable under criteria consistent with the Accreditation Board for Engineering and Technology, the policies of Arkansas State University, and the approval of the College of Engineering. The transfer student is required to complete at least 32 semester hours of engineering courses at Arkansas State University for graduation.

Engineering students eligible for the Honors Program are encouraged to participate in the program. Engineering courses taken for Honors credit must be approved by the College of Engineering and the Director of the Honors Program. The final course in the student's honors program can be an Honors Independent Study (HNRS 4003-6) or Honors Senior Thesis (HNRS 4993-6). Either course would be valuable in preparation for graduate studies.

**Major in Engineering**

**Bachelor of Science in Engineering**

**General Education Curriculum for Engineering Baccalaureate Degrees**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Total Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>Understanding Global Issues</td>
<td>3</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>Science</td>
<td>7</td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Engineering</td>
<td>41</td>
</tr>
</tbody>
</table>

**Major in Engineering**

**Bachelor of Science in Engineering**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Total Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>Understanding Global Issues</td>
<td>3</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
</tr>
<tr>
<td>Science</td>
<td>7</td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>6</td>
</tr>
<tr>
<td>Engineering</td>
<td>41</td>
</tr>
</tbody>
</table>

**Other Rules:**

A course may be counted in satisfaction of only one area requirement.

At least one History course must be selected.

With the exception of English courses (ENG), no more than two selections may have the same prefix. A science course and its laboratory will count as a single selection.

See the ASU web page (www.astate.edu) for current bulletin information.
### Additional required support courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2214 and MATH 3254, Calculus II and III</td>
<td>8</td>
</tr>
<tr>
<td>MATH 4402, Differential Equations</td>
<td>4</td>
</tr>
</tbody>
</table>

**Science Elective**

A total of 15 courses.

### Major Requirements:

- **ENGR 1402, Concepts of Engineering**
- **ENGR 1412, Software Applications for Engineers**
- **ENGR 2402, Statics**
- **ENGR 2413 and ENGR 2414, Mechanics of Materials and Laboratory for Mechanics of Materials**
- **ENGR 2423 and ENGR 2421, Electric Circuits I and Laboratory for Electric Circuits I**
- **ENGR 3413, Introduction to Design**
- **ENGR 3423, Dynamics**
- **ENGR 3433, Engineering Economics**
- **ENGR 3443, Engineering Thermodynamics I**
- **ENGR 4453, Numerical Methods for Engineers**
- **ENGR 4473, Senior Design Practicum**

**Area of concentration (selected from the three areas below)**

**Total** 76 credits

### Areas of Concentration:

In addition to the University requirements for all Baccalaureate Degrees, a Bachelor of Science in Engineering requires that one of the two following conditions be met: (1) "C" or better in each course in the 43 hour concentration area or (2) 2.5 or greater grade point average in the 43 hour concentration area.

#### Civil Engineering

- **ENGR 3473, Fluid Mechanics**
- **CE 2202, Civil Engineering Presentation**
- **CE 2223, Plane Surveying**
- **CE 3213, Structural Analysis I**
- **CE 3223, Civil Engineering Materials**
- **CE 3233, Structural Analysis II**
- **CE 3253, Engineering Hydrology**
- **CE 3263, Introduction to Environmental Engineering**
- **CE 3273, Water and Waste Systems**
- **CE 4223, Transportation Engineering**
- **CE 4243, Reinforced Concrete Design**
- **CE 4253, Soil Mechanics**
- **CE 4251, Laboratory for Soil Mechanics**

**Total** 43 credits

#### Electrical, Computer, and Information Engineering

- **ENGR 3401, Laboratory for Electronics I**
- **ENGR 3403, Electronics I**
- **ECIE 3313, Electrical Circuits II**
- **ECIE 3333, Digital Electronics I**
- **ECIE 3343, Engineering Fields and Waves I**
- **ECIE 3353, Continuous and Analog Systems**
- **ECIE 4323, Electrical Machinery OR ECIE 4353, Power Systems**
- **ECIE 4373, Electronics II OR ECIE 3363, Semiconductor Materials and Devices I**
- **ECIE 4371, Intermediate ECIE Laboratory I OR ECIE 3303, Laboratory for Semiconductor/Optoelectronics Materials and Devices I**
- **ECIE 4383, Digital Electronics II, ECIE 4353, Communications Theory, OR ECIE 4310, Control Systems**
- **ECIE or Computer Science Electives**

**Total** 43 credits

### Mechanical Engineering

- **ENGR 3473 and ENGR 3471, Fluid Mechanics and Laboratory for Fluid Mechanics**
- **ME 2502, Solid Modeling for Mechanical Engineers**
- **ME 3504, Process Monitoring and Control**
- **ME 3513, Mechanical Vibrations**
- **ME 3533, Engineering Thermodynamics II**
- **ME 4503, Fluid and Thermal Energy Systems**
- **ME 4543, Machine Design**
- **ME 4563, Heat Transfer**
- **ME 4563, Introduction to Manufacturing Processes**
- **ME 4733, Mechanical System Design**

**Total** 43 credits

NOTE: The footnotes listed below are for all engineering curricula.

**Approved Electives**

**Subject only to a program adviser's approval, these electives may be selected from any courses within the designated elective group that make a rational contribution to the student's personal and professional education.

### Technology Program

Charles Coleman, Director; Associate Professor Crumpton; Assistant Professor P. Isbell

#### ASSOCIATE IN SCIENCE DEGREE

The Associate in Science degree with a major in Technology will allow the student to meet the general education requirements, the degree preconditions, and utilize the opportunities to exercise work experience or prior education that may contribute to this degree option.

The program allows students to participate in a two-year program to meet the needs of industry while preserving the option of earning a baccalaureate degree in the future. It permits the industry to meet its educational and training requirements when a four-year degree is not warranted.

The student must complete a minimum of 62 credit-hours of work and must adhere to all policies established by the university. Flexibility is provided through counseling and the review of prior experience which may be substituted for formal college credit.

The Associate in Science—Technology is not accredited by the Accreditation Board for Engineering and Technology, Inc.

#### BACHELOR OF SCIENCE DEGREE

The Bachelor of Science degree with a major in Technology offers four emphasis areas: *Technical Studies, Technology Management, Printing Technology, and Manufacturing-Industrial Technology*. Each program will be tailored to meet the needs of the career specifications designated by the student.

The Technical Studies option is designed to permit the student to tailor a program in accordance with his/her specific interests for which a traditional baccalaureate degree is not attainable.

Students who have successfully completed some of the degree requirements in an occupational environment may continue their education under this degree umbrella.

The Technology Management option is designed to prepare a student to apply theories, perceptions, and principles established in the humanities and social and behavioral sciences, as well as sound business practices in a technology-oriented environment.

Grades with this emphasis will serve as liaison between manufacturing or industrial production and the administrators of a company. Consequently, a sound understanding of the basic principles of business, personnel management, and management techniques will be mandatory.

See the ASU web page [www.astate.edu](http://www.astate.edu) for current bulletin information.
The **Printing Technology** option is focused to develop and train qualified personnel for positions such as printing systems analysts, production coordinators, or operations managers. Students with a technology base blended with the printing courses will be provided a unique set of skills making them highly marketable.

The **Manufacturing-Industrial Technology** option is focused to develop and train qualified personnel capable of directing the production, distribution, and management of products and services.

The student, upon completion of the program, will have the ability to apply the principles of mathematical and physical sciences as related to technology, in the manufacturing-industrial setting.

Prior Learning Assessment is a program that enables students to earn college credit for learning acquired outside of the traditional college classroom. Seminars are provided to assist students in the development of prior learning portfolios. Upon completion of the assessment process, up to 25 percent of the degree requirements may be awarded using TECH 3721-9, Technical Career Subjects and/or TECH 1891-9, Occupational Studies Credit.

Students who are graduates of two-year occupational programs may be considered as candidates to enroll in the Bachelor of Science—Technology degree program.

The Bachelor of Science Technology degree is not accredited by the Accreditation Board for Engineering and Technology, Inc.

### Major in Technology

#### Associate in Science

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Associate in Science</td>
<td>35</td>
</tr>
</tbody>
</table>

**Specific General Education Recommendations:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2313, Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1033, Plane Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>PHY 2054, General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>SCOM 1203, Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Requirements for Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH 1413, Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>TECH 3863, Principles of Technology</td>
<td>3</td>
</tr>
<tr>
<td>TECH 2883, Quality Control OR TECH 3773, Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Technology Electives</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

**Electives:**

- Technical Electives: 9
- Total: 62

### Major in Technology

#### Bachelor of Science

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, page 81</td>
<td>46</td>
</tr>
</tbody>
</table>

**Specific General Education Recommendations:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2313, Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1033, Plane Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>PHY 2054, General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>SCOM 1203, Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3043, Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Core Requirements for Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH 1413, Engineering Graphics OR MIS 3013 Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 3153, Organizational Management OR Sociology OR Psychology Elective</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>

**Total:** 62

**Emphasis Area: (select one of the four options):**

- Manufacturing - Industrial:
  - TECH 3863, Principles of Technology
  - TECH 3883, Introduction to Quality Control OR TECH 3773, Statistics
  - TECH 3865, Industrial Safety
  - TECH 4813, Operations Systems Research
  - TECH 4823, Quality Assurance
  - Total: 33

- Printing Technology:
  - PRIN 1613, Graphic Communication Systems
  - PRIN 1613, Introduction to Digital Publishing
  - PRIN 2623, Image Generation & Layout
  - PRIN 2653, Image Conversion
  - PRIN 3604, Lithographic Technologies
  - PRIN 3663, Gravure, Screen, Flexographic
  - PRIN 3803, Digital Color Prepress
  - PRIN 4613, Post Press Technologies
  - PRIN 4683, Management of Publication Production
  - Technology Electives
  - Total: 33

- Technology Management:
  - TECH 3713, Fiscal Aspects
  - TECH 3753, Legal Aspects
  - TECH 4443/Labor Relations
  - Accounting or Management Electives
  - Management Electives
  - Total: 33

- Technical Studies:
  - TECH 4843, Labor Relations
  - TECH 4883, Work Center Management
  - Technology Electives
  - Total: 33

**Electives:**

- Technical Electives: 24
- Total: 124

---

See the ASU web page (www.astate.edu) for current bulletin information.
**Minor in Engineering**

One of the following:  
ENGR 1412 Software Applications for Engineers, ENGR 1422 Concepts of Engineering,  
CE 2202 Civil Engineering Presentations, ECIE 3302 Computer and Graphics Applications in  
Electrical Engineering, ME 2902 Solid Modeling for Mechanical Engineers, or ENGR 4453  
Numerical Methods for Engineers. **... 2**  
ENGR 2403, Statics **... 3**  
ENGR 2423 Electric Circuits I and ENGR 2421 Laboratory for Electric Circuits I OR  
ENGR 2413 Mechanics of Materials and ENGR 2411 Laboratory for Mechanics of Materials  
**... 4**  
ENGR, AGEN, CE, ECE, or ME prefixed courses of 2000, 3000 or 4000 level courses **...**  
13-15  
**TOTAL 22-24**

*ENGR 1412 is strongly recommended unless the student has already completed an appropriate computer applications or programming course or otherwise has a documented strong skills-base in computer applications.

**No more than 4 credit hours of these additional 13-15 hours can be 2000-level.

***Under normal circumstances, no more than 3 credit hours of the 22 credit hour minimum for the minor can be special problems, independent study, internship, honors, senior thesis, or other non-standard courses under an engineering prefix, or honors prefix and engineering coordination. Any exceptions would have to be formally proposed, justified and approved ahead of time in writing by the student’s engineering minor committee, the appropriate program director, the dean, and the departmental curriculum committee and would, only in extraordinary circumstances, exceed 6 credit hours of such courses (except if a new regular, multi-student course in the student's plan-of-study was being offered for the first time under a special problems designation).

****The student should be aware that additional credit hours, for example from other engineering, mathematics, or science courses, may be indirectly required to satisfy all formal prerequisites and co-requisite requirements for these and the engineering courses designated for the minor, as per the ASU Undergraduate Bulletin. Any justified exceptions to the official bulletin-listed prerequisites and co-requisites would be considered on a case-by-case basis and have to be approved by the student's engineering minor committee, the program director, and the instructor for the course.

*****In addition, the awarding of a minor in engineering will require that the student has made a grade of C or better in all courses comprising the 22-24 credit hours or has a grade point average of 2.5 or above over these courses.

Students declaring a minor in engineering must first contact the relevant engineering program director as early as possible for appointment of an advisor and plan-of-study committee. The student and committee will then develop a brief proposal to be approved by the program director and detailing remaining coursework in the context of the student's career and graduate education goals. No more than 12 credit hours of courses completed prior to, or commencing earlier than 10 days before, this approval may be used to satisfy minor requirements.

**DEPARTMENT OF ENGINEERING COURSE DESCRIPTIONS**

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

**Agricultural Engineering (AGEN)**

1113. Engineering Analysis Techniques of engineering analysis, solutions, and interpretation of engineering problems, systems, and data.

1133. Machine Tools and Welding Principles of machine tool operations; current techniques in arc and gas welding. Lecture two hours, laboratory two hours per week (D).

2153. Farm Mechanics Advanced training in selection and care of tools and machinery; welding, metal work, plumbing, forge work, wood work, and electricity. Lecture one hour, laboratory four hours per week. (Not for engineering credit) (D)

2173. Farm Power and Machinery Farm mechanization, gas engines, tractors, plows, mowers, planters, selection, cost operation, and servicing farm machinery. Lecture two hours, laboratory two hours per week. Prerequisite: MATH 1023 or adviser consent. (D)

3113. Soil and Water Engineering Instruction and field practice in the basic engineering principles of erosion control, drainage, irrigation, and dumpy level. Lecture two hours, laboratory two hours per week. Prerequisite: MATH 1023 or equivalent. (D)

3123. Conservation Engineering The study of precipitation, infiltration, evaporation, transmission, runoff, and the engineering principles for erosion control, drainage, and soil and water conservation structures. Corequisite: ENGR 3413 and ENGR 3473. Prerequisite: "C" or better in CE 2223. (D)

3133. Agricultural Machinery Analysis and design of agricultural machinery. Corequisite: ENGR 3413 (D)

3143. Agricultural Machinery Management Principles of machinery selection including power, size, cost, matching tractor power to machine size, and a review of microcomputer software for machinery management. (Not for engineering credit) Prerequisite: "C" or better in AGEN 2173 and any introductory computer course. (D)

3153. Grain Processing Methods of grain drying, handling, storing, cleaning, and sizing. Design of grain drying and storage facilities. Corequisite: ENGR 3413. (D)

4113. Machinery Design I Application of the theory developed in the fundamental engineering courses to the design of machine elements. Prerequisites: "C" or better in ENGR 2413, ENGR 3413 and ENGR 3423. (D)

4133. Animal Environment Management of environmental factors affecting physiological responses and the production performances of animals and the design of a facility with controlled environment. Prerequisite: "C" or better in ENGR 3413. Corequisite: ENGR 3443. (D)

4143. Building Construction Planning, arranging, and laying out buildings for economy, convenience, and appearance: materials, cost and repair; concrete masonry: plumbing. Lecture two hours, laboratory two hours per week. (Not for engineering credit) (D)

4153. Energy Conversion Combustion analysis of hydrocarbon fuels. Transmission of energy by mechanical, electrical, and hydraulic means. Selected topics in mass transfer and fluid mechanics. Prerequisite: "C" or better in ENGR 3413 and ENGR 3443. (D)

4163. Design of Electrical Controls for Agricultural Systems The selection and design of electrical and control circuits to provide light, heat, and power for agricultural production and processing enterprises. Prerequisite: "C" or better in ENGR 2423 and ENGR 3413. (D)

4173. Design of Heating, Ventilating, and Air-Conditioning Systems Design of HVAC systems to modify environmental conditions. Prerequisite: "C" or better in ENGR 3413 and ENGR 3445. (D)

4183. Design of Irrigation Systems Design of irrigation systems; includes water distribution, land requirements, surface and subsurface irrigation systems. Field trips are required. Prerequisite: "C" or better in ENGR 3413 and ENGR 3473. (D)
Civil Engineering (CE)

2202. Civil Engineering Presentations An introduction into computer aided design (CAD) for civil engineers with applications in civil engineering drawings. Four different types of civil engineering drawings will be developed and presented in the course. Prerequisite: CE 2223. (S)

2223. Plane Surveying Theory and practice of plane surveying. Lecture one hour, laboratory four hours per week. Prerequisite: MATH 1033 or equivalent. (F)

3213. Structural Analysis I Analysis of determinate and indeterminate structures and trusses, shear and moment diagrams, influence lines and moving loads, deflection calculations, and computer solutions. Lecture three hours per week. Prerequisite: "C" or better in ENGR 2403. (F, S)

3223. Civil Engineering Materials Theory and application of materials used in civil engineering. Aggregate testing, concrete testing, concrete mix design, asphalt testing, asphalt mix design, timber testing. Lecture one hour, laboratory three hours per week. Prerequisite: "C" or better in ENGR 2413. (F)

3233. Structural Analysis II Analysis of indeterminate structures and trusses using approximate analysis, area moment and conjugate methods, virtual work, slope deflection, and moment distribution. Computer analysis by finite elements. Lecture three hours per week. Prerequisites: "C" or better in CE 2202, CE 3213 and ENGR 2413. (F)

3253. Engineering Hydrology Studies of the hydrologic cycle, solar radiation and meteorology, precipitation, evaporation, transpiration, groundwater flow, hydrographs, flood routing, and probability concepts. Lecture three hours per week. Prerequisite: "C" or better in ENGR 3473. (S)

3263. Introduction to Environmental Engineering Introduction to environmental engineering fundamentals, concepts of mass balance, water and wastewater treatment, air pollution, solid waste management, and hazardous waste. Lecture three hours per week. Prerequisite: Junior standing, CHEM 1013, MATH 2204. (S)

3273. Water and Waste Systems Projection of water requirements and wastewater flows, water and waste systems hydraulics, design of water distribution systems, sanitary sewers, stormwater collection systems, and pumping systems. Lecture three hours per week. Prerequisite: "C" or better in CE 2202 and ENGR 3473. (S)

4213. Introduction to Finite Element Analysis Theory and application of energy concepts and structural mechanics required for the development of finite element methods are presented. Applications to beams, trusses, torsion, etc. are presented. Prerequisites: "C" or better in CE 3213 and ENGR 4453. (F)

4223. Transportation Engineering Provides the engineering student with an understanding of the principles of highway design, pavement designs, highway economics, traffic theory and other areas related to traffic engineering. A highway design project is required. Prerequisites: "C" or better in CE 2202, CE 2223, CE 4253 and ENGR 3413. (S)

4233. Foundation Engineering Prediction of soil variation; soil investigations; stress distribution and bearing capacity; dewatering analysis and procedures; and settlements. The design and analysis of retaining structures and lateral earth pressures; shallow foundations, pile foundations. Three foundation design projects are required. Prerequisite: "C" or better in CE 2202, CE 4253 and ENGR 3413. (S)

4243. Reinforced Concrete Design Design of beams with bending; and shear stress, splicing design and deflection calculations; design columns. Prerequisites: "C" or better in CE 3213 and ENGR 3413. (F)

4251. Laboratory for Soil Mechanics Experiments in analysis of soil systems including index properties, permeability, compressibility and shear strength. Corequisite: CE 4253. (F)

4253. Soil Mechanics Physical properties of soils as used in design; specific gravity, grain size distribution, plasticity, shrinkage, permeability, consolidation and shear strength. Foundation design for consolidation. Prerequisite: "C" or better in ENGR 3413. Corequisites: ENGR 3473 and CE 4251. (F)

4263. Water and Waste Treatment Design of physical, chemical and biological unit processes for treatment of water, wastewater and sludges. Advanced wastewater treatment processes are presented. Student papers on selected wastewater applications are required. Prerequisites: "C" or better in CE 3273 and ENGR 3413. (S - even)

4273. Advanced Surveying Techniques of route, rural and urban, construction, and photogrammetric surveying. Elements of electronic measurements. Legal aspects of surveying. Lecture two hours, laboratory three hours per week. Prerequisite: "C" or better in CE 2223. (S - odd)

4283. Structural Steel Design Design of structural systems in steel. Design of tension and compression members, beams with bending and axial stresses, bolted and welded connections. Prerequisite: "C" or better in CE 3213 and ENGR 3413. (S)

Electrical, Computer, and Information Engineering (ECIE)

1303. Introductory Electrical Engineering Practicum Introduction to engineering and electrical engineering by branch and function (including analysis, design, research, and development). Engineering professionalism and infrastructure. Introductory engineering theory, calculations, computer and information technologies, and laboratory experimentation represented by electrical circuits. Lecture two hours and laboratory two hours per week. Prerequisites: High school algebra, high school trigonometry, and high school physics or chemistry. (D)

3302. Computer and Graphics Applications in Electrical Engineering Modern computer applications, graphic techniques, and software specific to electrical engineering. Circuit schematics and simulation. Data acquisition, processing, and presentation. Multidimensional graphics. Printed circuit board design. Prerequisites: "C" or better in ENGR 1412, ENGR 1403, or CS 2183 and CS 2181; and ENGR 3403. (D)

3303. Laboratory for Semiconductor/Opto electronic Materials and Devices I Experimentation and demonstrations in semiconductor growth and deposition, material analysis and characterization, doping, and processing. Fabrication of simple devices. Metalization, etching, and other manufacturing processes. Lecture one-two hours, laboratory five-four hours per week. Prerequisite: CHEM 1021, PHYS 2004, and "C" or better in ENGR 3401. (S - even)

3313. Electric Circuits II Transient analysis, average power, RMS values, mutual inductance; resonance; network theorems and principles; polyphase networks; complex power. Prerequisite: MATH 2214 and "C" or better in ENGR 2423. (S)

3331. Laboratory for Digital Electronics I Experimentation and design with digital electronic and computer components and circuits including logic gates, flip flops, counters, and registers. Practical applications in timing and control. Logic families such as TTL, ECL, and CMOS. Prerequisite: "C" or better in ENGR 2421. Corequisite: ECIE 3333. (D)
3333. Digital Electronics I  Introduction to the analysis and design of digital and computer circuits; binary arithmetic, combinational logic, sequential logic, registers, counters, adders, comparators, computer organization. Prerequisite: "C" or better in ENGR 2423, or consent of instructor. Recommended corequisite: ENGR 3403 and ENGR 3413. (F, SU)

3343. Engineering Fields and Waves I  Study of time-invariant electric and magnetic fields in free space and in materials, electrical current flow as a function of electric field, magnetic flux, interaction of magnetic fields with electrical current and voltage, electromagnetic and magnetic potentials, time-changing electric and magnetic fields, and introduction to Maxwell's equations. Prerequisites: MATH 3254, "C" or better in ECIE 3313. (F)

3353. Continuous and Analog Systems  Methods of analysis of continuous and analog systems and associated synthesis, simulation, and design, system response in the time and frequency domains, Laplace transforms, Fourier series and transforms, transfer functions, and convolution. Prerequisite: "C" or better in ECIE 3313 and ENGR 3413, or consent of instructor. Corequisite: MATH 4403. (F)

3363. Semiconductor Materials and Devices I  Semiconductor materials and theory of solid state electronic devices. Semiconductor growth and processing techniques. Semiconductor parameters such as bandgap, mobility, carrier densities, diffusion length, carrier lifetime, and energy level distribution. P-n junctions and Schottky barriers. Constraints and limitations on practical devices. Prerequisite: CHEM 1023, PHYS 2044, and "C" or better in ENGR 3403 or consent of instructor. (S -even)

3371. Laboratory for Computer Engineering I  Design and experimentation in computer electronics, hardware, communication, and information coding to support knowledge gained in the partner course ECIE 3373, Computer Engineering I. Prerequisites: CS 2193 and CS 2191; and "C" or better in ECIE 3333. Corequisite: ECIE 3373. (D)

3373. Computer Engineering I  Introduction to computer engineering including fundamental electronic devices and circuits, architecture, operating systems, intramachine signal communication, and fundamental coding algorithms. Prerequisites: CS 2183 and CS 2191; and "C" or better in ECIE 3333 or consent of instructor. (D)

4303. Engineering Fields and Waves II  Study of electromagnetic waves in free space, dielectrics, and conductors; transmission lines, generalized polarization, reflection, refraction, and diffraction, waveguides and resonators, antennas, and radiation. Prerequisites: MATH 4403, "C" or better in ECIE 3343 and ENGR 3413. (D)

4312. Semiconductor/Optoelectronic Materials and Devices Laboratory II  Continuation of ECIE 3303, including fabrication of discrete devices and advanced characterization and processing techniques. The latter half of the course will involve design and conduction of original experiments by student teams to culminate in a senior thesis or equivalent form of dissemination. Students are encouraged to take the course under an Honors designation. Prerequisite: ECIE 3303. Suggested corequisite: ECIE 4713. (D)

4313. Control Systems  Analysis and design of linear feedback systems. Transfer functions, transient and steady-state characterization, stability determination. Closed loop analysis and design. Root locus method. Prerequisites: MATH 4403, "C" or better in ECIE 3353, ENGR 3403, ENGR 3413. (D)

4321. Laboratory for Electrical Machinery  Experiments dealing with motor, generators, transformers, and associated measurements and controls. Prerequisite: Senior standing or consent of instructor. Pre/Co-requisite: ECIE 4323. (D)

4323. Electrical Machinery  Introduction to the analysis and design of electromechanical energy conversion systems, magnetic circuit theory, general transformer and machinery theory, DC and AC motors and generators. Prerequisite: "C" or better in ECIE 3313 and ENGR 3413 or consent of instructor. (D)

4333. Communications Theory  Frequency spectra of time signals. Review of Fourier series and transforms. Signal mixing, modulation, and demodulation. AM and FM broadcasting techniques and bands. Pulsed and digital communication modes. Prerequisite: "C" or better in ECIE 3353, ENGR 3403, and ENGR 3413. (D)

4343. Microprocessor Applications  A microcomputer hardware interfacing course for senior level engineers. A survey of small computers and their application to engineering functions including control, sensing, and computation. The concept of using assembly language and other languages as control programming languages are introduced. Prerequisites: "C" or better in ECIE 3333, ECIE 3331 and ENGR 3413, or consent of instructor. (D)

4353. Power Systems  Generation, transmission, and distribution of large scale electrical power, associated energy losses and practical design problems/complications. Transmission line analysis. Three phase power networks. Load monitoring and control. Prerequisite: "C" or better in ECIE 3313 and ENGR 3413, or consent of instructor. Corequisite: MATH 4403. (D)

4363. Optical Electronics  Review of electromagnetic waves, optics and semiconductors. Light detectors, Sources such as LED's, laser diodes, and lasers. Optical fibers. Corequisites: ECIE 3343, ECIE 3363, or consent of instructor. (D)

4371. Intermediate Electrical Engineering Laboratory  Advanced design-oriented experiments in analog electronic and AC electrical devices and circuits. Corequisite: ECIE 4373. Prerequisite: "C" or better in ECIE 3313 and ENGR 3401 or consent of instructor. (S -odd)

4373. Electronics II  A continuation of ENGR 3403 with emphasis on the analysis, simulation, and design of feedback, operational amplifier systems, frequency response, integrated circuits and power and waveshaping circuits. Prerequisite: "C" or better in ECIE 3313, ENGR 3403, and ENGR 3413. Corequisite: ECIE 4371. (S -odd)

4383. Digital Electronics II  Continuation of the study of digital circuit design with emphasis on the design of larger systems and use of LSI components. Further transfer logic, computer interfacing and design, microcomputer-based system design. Prerequisite: "C" or better in ECIE 3333 and ENGR 3413. (D)

4383. Discrete and Digital Systems  Analysis and application of discrete/digital systems including finite difference-based recursion equations, z-transforms, delay elements and memory devices, discrete/digital simulation of continuous/analog systems, and digital filter applications. Prerequisite: "C" or better in ECIE 3353 or consent of instructor. (D)

4703. Signal and Information Processing  Information processing theory and applications including discrete-time signals, time-domain systems, transform-domain representation of discrete-time signals, digital processing of continuous time signals, digital filter structure and design, propagation of signals and associated noise and distortion, and analysis of finite word length effects. Prerequisite: "C" or better in ECIE 4333 or ECIE 4393 or consent of instructor. (D)

See the ASU web page (www.astate.edu) for current bulletin information.
4713. Semiconductor Materials and Devices II Continuation of ECIE 3363, including configuration and operation of advanced solid state junction devices. Large-scale to ultralarge scale integration/miniaturization of electronics into integrated circuits. Metallization/shaping technology and manufacturing aspects. Prerequisite: "C" or better in ECIE 3363. (D)

4723. Power Electronics and Control Electrical and electronic circuits for switching, relaying, shaping, and amplifying large current, voltage, and power signals, including relays, transformers, MOSFET's, diacs, triacs, SCR's, unijunction transistors, optorelays, optocouplers, rectifiers, and push-pull amplifiers. Introduction to digital control including programmable logic controllers. High voltage circuitry. Representative industrial applications and practical constraints and specifications. Prerequisites: ECIE 3333, ENGR 3403, and ENGR 3401. Suggested co-requisite ECIE 4313. (D)

Engineering (ENGR)

1402. Concepts of Engineering An introduction to the various engineering disciplines. Topics include conservation principles, elementary measurement techniques, teamwork, and an introduction to technical practices. Prerequisite: 19 Math ACT or MATH 1023. (F, S)

1403. Engineering Computer Solutions Problems encountered in different fields of engineering; analysis and solution to these problems. Prerequisite: MATH 1023 or equivalent. Lecture two hours, laboratory two hours per week. (D)

1412. Software Applications for Engineers An introduction to software applications used by the various engineering disciplines. Technical word processing and the use of spreadsheets as a mathematics tool are developed. Accepted practices of data presentation and an introduction to presentation graphics are covered. Prerequisite: 19 math ACT or MATH 1023. (F, S)

1413. Engineering Graphics Emphasis on visual aspects employing the techniques of computer aided drafting and design (CADD) with modern engineering graphic principles. Lecture one hour, laboratory five hours per week. (Cross listed as TECH 1413) (D)

2403. Statics Principles of static equilibrium; analysis of structures; friction; center of gravity; moment of inertia; and product of inertia. Prerequisite: MATH 2204, and "C" or better in ENGR 1402. (F, S, SU)

2411. Laboratory for Mechanics of Materials Material will be tested in the laboratory consistent with topics covered in Mechanics of Materials course, which will include strain measurement testing machines and properties of materials. Laboratory two hours per week. Corequisite: ENGR 2413. (F, S)

2413. Mechanics of Materials Stress and deformation of members in tension, compression, torsion, and bending. Columns, statically indeterminate beams, and simple connections. Prerequisite: "C" or better in ENGR 1412 and ENGR 2403. (F, S, SU)

2421. Laboratory for Electric Circuits I Basic experimentation consistent with the theory in ENGR 2423. Prerequisite: ENG 1013, and "C" or better in ENGR 1402. Corequisite: ENGR 2423. (F, S)

2423. Electric Circuits I The fundamental laws of circuit theory applied to resistive networks; network topology; mesh currents and node voltages; network theorems; one-terminal and two-terminal pair resistive networks. Time response functions of R-L and R-C circuits and introduction to steady-state AC analysis. Prerequisite: "C" or better in ENGR 1412 and corequisite of MATH 2214. (F, S, SU)

3401. Laboratory for Electronics I Basic laboratory experiments in electronic circuits and solid state electronic devices. Corequisite: ENGR 3403. Prerequisite: "C" or better in ENGR 2421. (F, S)

3403. Electronics I Theory, analysis, and introductory design of diode, bipolar junction transistor, operational amplifier, and field effect transistor devices and circuits. Prerequisite: "C" or better in ENGR 2423. (F, S, SU)

3413. Introduction to Design The task of design, which includes the formulation problem, approaches to design problems, analysis, material selection and economics, is considered in the design decisions from conception to final product. Prerequisites: "C" or better in ENGR 2413. (F, S)

3423. Dynamics Kinematics and kinetics of particles and of rigid bodies; work and energy, impulse and momentum; special topics. Prerequisite: "C" or better in ENGR 2403. (F, S, SU)

3433. Engineering Economics Quantitative techniques for decision making; break-even analysis, economic models, gaussian distributions, inventory control, production models, and mathematical programming. Prerequisite: MATH 1023. (F, S, SU)

3443. Engineering Thermodynamics I Engineering thermodynamics involves studies in the area of properties of substances, work and heat, the first and second laws of thermodynamics, entropy, ideal gases, availability, irreversibility, and efficiency. (F, S, SU)

3453. Materials Science Structure and properties of solids; modification of structure for engineering purposes; characteristics of polymers, ceramics and metals. Prerequisite: CHEM 1013. (F, S)

3463. Applied Robotics I Design of small robotic machinery. Course includes both hardware and software design. Students will be required to write and implement a robot control program in the BASIC programming language. Prerequisite: "C" or better in ECIE 3333 or consent of instructor. (D)

3471. Laboratory for Fluid Mechanics Experiments in fluid phenomena which emphasize the topics covered in ENGR 3473. Formal laboratory reports will be required. Laboratory two hours per week. Corequisite: ENGR 3473. (F, S)

3473. Fluid Mechanics Basic fundamentals of fluid properties, fluid statics, fluid equations, viscous effects, and ideal fluid flow are applied to engineering problems in closed conduits, open channels, and fluid measurements. Prerequisite: "C" or better in ENGR 2403. (F, S, SU)

349V. Engineering Internship Students complete a supervised work experience involving practical application of the knowledge and skills acquired in engineering courses. Internships (minimum of 50 hours of work per credit hour awarded) are arranged by the student, an intern supervisor, and a supervising faculty member. Progress and final reports are required. Maximum degree credit for this course is three hours. Prerequisite: "C" or better in ENGR 3413 and consent of program director. (F, S, SU)

4453. Numerical Methods for Engineers Numerical methods and computational techniques for solving engineering design problems. Prerequisite: MATH 3254. Corequisite: ENGR 3413. (F, S)

4473. Senior Design Practicum Interdisciplinary groups work on a selected design problem from conceptualization through detailed final design. Comprehensive final reports and presentations to faculty are required. Lecture studies include project management, legal/ethical issues, and effective communications. Lecture one hour, laboratory six hours per week. Prerequisite: "C" or better in ENGR 3413, senior standing, and consent of instructor. (F, S)

212 See the ASU web page (www.asate.edu) for current bulletin information.

213 See the ASU web page (www.asate.edu) for current bulletin information.
4491-2-3. Special Problems in Engineering Individually directed problems in engineering for juniors and seniors. Must be arranged in consultation with an engineering professor in the appropriate concentration area. The course outline and a project summary listing the goals and expectations must be approved by the student’s adviser and the department chair. A written report is required. A copy must be filed in the department office. (D)

4543. Machine Design Analysis and design of mechanical system components using theoretical and empirical concepts coupled with computational modeling and numerical analysis. Prerequisites: “C” or better in ENGR 3413. (F,S)

Mechanical Engineering (ME)

2502. Solid Modeling for Mechanical Engineers An introduction to solid modeling and computer aided drafting (CAD) for mechanical engineers. Three-dimensional models of mechanical components are virtually constructed using appropriate software tools. (S)

3503. Mechanical Engineering Laboratory Theory and application of instrumentation for typical measurement techniques are used to evaluate the control/performance of mechanical and thermodynamic systems. Design of experiments using standard techniques and computerized data acquisition, reduction and analysis are used by the student. Accepted procedures for presentation of experimental results are emphasized. Prerequisites: Junior standing, to include MATH 4403 and “C” or better in ME 3533. Corequisites: AGEN 4113 and ME 4553. (D)

3504. Process Monitoring and Control Theory and application of instrumentation, measurement, and control of engineering systems. Prerequisites: MATH 4403 and “C” or better in ENGR 2423 and ENGR 3443. (F)

3513. Mechanical Vibrations Kinematics of harmonic and nonharmonic vibrations; system of one and several degrees of freedom, free and forced vibrations; self-excited vibrations. Prerequisites: MATH 4403, “C” or better in ENGR 3413 and ENGR 4323. (S)

3533. Engineering Thermodynamics II Application of first and second law concepts to actual and ideal cycles and processes. Prerequisites: “C” or better in ENGR 3413 and ENGR 3443. (S)

4503. Fluid and Thermal Energy Systems Analysis and design of components, systems, and processes using the fundamentals presented in Thermodynamics, Fluid Mechanics, and Heat Transfer. Corequisite: ME 4553. Prerequisites: “C” or better in ENGR 3413, ENGR 3443, and ENGR 3473. (F)

4513. Dynamics and Control of Machinery Dynamics analysis of mechanism including rigid body dynamics and balancing of machines. Introduction to linear mechanical systems, and the stability analysis of linear mechanical systems. Three hours lecture per week. Prerequisites: “C” or better in ENGR 3413 and ENGR 3423. (D)

4523. Introduction to Finite Element Analysis Theory and application of energy concepts and structural mechanics required for the development of finite element methods are presented. Applications to beams, trusses, torsion, etc. are presented. Prerequisites: ENGR 2413. (F)

4533. Applied Robotics II Design of sophisticated robotic machinery. Course includes both hardware and software design. Students will be required to write and implement their own original control programs and mechanical designs. The primary control language will be the BASIC computer language. Prerequisites: “C” or better in ENGR 3413, and ECIE 3553 or consent of instructor. ENGR 3493 is recommended. (D)

4541. Laboratory for Integrated Design, Modeling, and Analysis of Machine Components Three-dimensional solid modeling, linear stress analysis using the finite element method, and review of other modern virtual design techniques. Laboratory two hours per week. Corequisite: ME 4543. (F)

4553. Heat Transfer Application of theories of heat transfer by conduction, convection, and radiation to manufacturing processes and industrial applications. Prerequisites: MATH 3254, “C” or better in ENGR 2423, ENGR 3413, ENGR 3443, and ENGR 3473. (F)

4561. Introduction to Manufacturing Processes Laboratory Basic manufacturing experiments involving metal cutting, metal forming and other manufacturing techniques are conducted to assist with the understanding of the lecture material. Laboratory two hours per week. Corequisite: ME 4563. (F)

4563. Introduction to Manufacturing Processes Principles of manufacturing processes—including common material removal processes, the principles of metal casting and forming, and an introduction to polymers, composites, and non-traditional processes. Prerequisites: ENGR 2413 and ENGR 3453. (F)

4573. Mechanical System Design Capstone design course for mechanical systems. Teams of students will design and assemble a mechanical system which satisfies the specifications of a selected design problem. Progress reports, final reports, and an assembled final product will be required.

4583. Energy Conversion Combustion analysis of hydrocarbon fuels. Transmission of energy by mechanical, electrical, and hydraulic means. Selected topics in mass transfer and fluid mechanics. Prerequisite: “C” or better in ENGR 3413 and ENGR 3434. (D)

4593. Design of Heating, Ventilating, and Air-Conditioning Systems Design of HVAC systems to modify environmental conditions. Prerequisite: “C” or better in ENGR 3413 and ENGR 3443. (S)

APPLIED SCIENCES: TECHNOLOGY

Technology (TECH)

(Most Technology courses have had no previous five-digit course numbers)

1013. Networking Essentials—Cisco I The study of router hardware and software. Topics include the OSI model, data link and network layer devices, IP addresses, subnet masking, cabling, topologies, writing closets, basic electrical and electronic issues in networks, and TCP/IP network-layer protocols. Prerequisite: Basic computer knowledge. (F)

1023. Router Technologies—Cisco II The second course in the study of router hardware and software. Topics include TCP/IP transport-layer protocols, flow control, IOS, router configuration, IP address configuration, RIP and IGRP routing protocols, IP traffic filtering, and routing problem solving. Prerequisite: TECH 1013. (S)

1413. Engineering Graphics Emphasis on visual aspects employing the techniques of computer aided drafting and design (CADD) with modern engineering graphic principles. Lecture one hour, laboratory five hours per week. (Cross listed as ENGR 1413) (F,S,SU)

1423. Beginning Solid Modeling CADKEY I CADKEY introduces the powerful tools to be used in 2 dimensional (2D) drafting, 3D generation as well as solid modeling applications. This integration, called “Hybrid Solid Modeling”, is the combination of tools. This computer application in graphic techniques is software specific to technology as well as engineering design student, using design intent logic. Prerequisite TECH 1413. (F)

1803. Computer Aided Drafting and Design I A beginning course for the technician, technologist, or engineer. The course includes involvement in the use of the computer to produce design and working drawings. In addition to computer usage, sketching, electronic, mechanical and civil drawing are emphasized. (S-even)
1891-9. Occupational Studies Credit Through this course students with technical credit from an accredited institution may earn college credit. Course may be repeated. No more than 25 percent of the degree may be satisfied with this course and/or TECH 3721-9. (1-9 hours) (D)

2033. Advanced Routing and Switching—Cisco III A continuation of the study of router hardware and software. Topics include LAN switching, VLANs, LAN design, IGRP, Access Lists, IPX and Network Management. Prerequisite: TECH 1023. (F)

2043. WAN Technologies and Design—Cisco IV A continuation of the study of router hardware and software. Topics include WANS, WAN Design, PPP, ISDN, Frame Relay, and Network Management. Prerequisite: TECH 2033. (S)

2053. Building Scalable Networks—Cisco V Topics include: overview of scalable internetworks, managing traffic and access, managing IP traffic, extending IP addressing using VLMSS, configuring OSPF in single area, interconnecting multiple OSPF areas, configuring enhanced IGRP, optimizing routing update operation, and configuring BGP. Prerequisite: TECH 2043. (F)

2063. Remote Access Networks - Cisco VI Topics include: Learn how to build, configure, and troubleshoot a remote access network to interconnect central sites to branch offices and home offices. Students also learn how to control access to the central site, as well as to maximize bandwidth utilization over the remote links. Prerequisite: TECH 2053. (S)

2443. Introduction I-DEAS 10 Parametric Modeling techniques and concepts. Prerequisite TECH 1413. (S)

2453. Technology Design - Solid Works I Drawing and detailing with SolidWorks, a design automation software package used to produce parts, assemblies and drawing. Prerequisite TECH 1413. (F)

2803. Computer Aided Drafting and Design II An extension of CADD I, with the use of more integral parts of CAD. Prerequisite: TECH 1003 or instructor approval. (S-odd)

2863. Principles of Technology The role and function of technology development in human resources. Course provides an introduction to the concepts and philosophies of the technical work place and the use of technologies. (D)

2883. Introduction to Quality Control A fundamental course in quality control. Content deals with universal principles of quality assurance in a technical environment. Topics include mechanics of a quality system, planning a quality information system, quality practices, system elements and controls, and definitions of quality. (D)

3423. Intermediate Solid Modeling CADKEY II Continuation of Beginning Solid Modeling CADKEY I. Prerequisite TECH 1423. (S)

3413. AutoCAD 2002/Inventor 6 This is a beginning level 1 course in CAD. This course is designed to demonstrate how AutoCAD is used in model parametric space. This course will only deal with 2d mechanical, electrical and civil aspects of CAD. Prerequisite: TECH 1413. (S)

3433. AutoCAD 3-D Modeling This is an Advance level II course in CAD. This course is designed to demonstrate how to manage 3-D space; how to make 3-D sire frame, surface, and solid models; how to modify them; and how to display them. Prerequisite TECH 3413. (F)

3443. Advanced I-DEAS 10 Advanced Parametric Modeling techniques and concepts. Prerequisite: TECH 2443 (F)

3453. Advanced Technology Design - Solid Works II Continuation of Technology Design - SolidWorks I. Prerequisite TECH 2453. (S)

3473. Structural Drafting Structural steel drafting is used to construct and design support frames for modern commercial and industrial buildings. Special emphasis is placed on how structural drafters in both structural design and fabrication offices prepare the working drawings required to help transform the architect's vision into reality. Prerequisite: TECH 1413.

3713. Fiscal Aspects An introduction to fiscal structures and problems encountered in the technically oriented enterprise. (S-odd)

3721-9. Technical Career Subjects Through this course students having work experience and/or company sponsored training will undergo portfolio assessment to determine credit hour award. Course may be repeated. No more than 25% of the degree may be satisfied with this course and/or TECH 1891-9. (1-9 hours) (D)

3753. Legal Aspects An introduction to the types of legal problems encountered in the technically oriented enterprise. (S- even)

3761-3. Industry Special Topic Addresses specific needs of business or industry. May be repeated for a maximum credit of six hours. (1-3 hours) (D)

3773. Statistics Basic concepts and methods of statistics in a technical environment, including descriptive statistics, significant tests, estimation, sampling, and correlation. (D)

3801. Laboratory for Electrical Systems Laboratory exploration of circuit concepts and techniques using instruction and the concepts as a tool. Laboratory two hours per week. (Special course fee: $70.00) (F-odd)

3803. Electrical Systems Fundamentals and utilization of electric power through appropriate units of equipment and systems for heating, cooling, working, and controls; energy transmission and measurements; equipment selection, operation, maintenance, and evaluation for given tasks. Prerequisite: MATH 1033. (F)

3813. Programmable Logic Control Introduction to programmable logic controllers. Topics will include programming basics, instruction sets, maintenance and trouble shooting, program editing and the use of EEPROM memory modules. Prerequisite: TECH 3803. (S)

3821. Technology Laboratory Laboratory topic designed to address specific needs of the technology being studied or the needs of industry. May be repeated for credit. Maximum degree credit for this course is three hours. Laboratory two hours per week. (D)

3823. Mechanics I Introduction to statics and dynamics at the technologist's level. Topics will include resultants and equilibrium of force systems, friction centroids, moments of inertia, plane motion, working energy. Prerequisite: MATH 1033. (F)

3833. Mechanics II Properties and uses of metals, woods, concrete, and concrete products as materials of construction; analysis and selection for technological applications such as pressure vessels, shafts, beams, and columns. Prerequisite: TECH 3823. (S)

3843. Manufacturing Materials and Processes Structure and properties of metals and other materials used in manufacturing. Formation, treatment, and modification of materials through manufacturing processes. Advantages and disadvantages of alternative materials and processes for specific applications. Important emerging technologies. Prerequisite: CHEM 1003 or high school chemistry and MATH 1033. (S-odd)

3853. Computer Aided Manufacturing (CAM) A study of 3D CAM software package that prepares NC programs for complex shapes and surfaces, basic contouring, drilling pocketing and geometric creations, including splines, ellipses, and lettering. Prerequisite: TECH 1803 or CADKEY experience. (SU)

See the ASU web page (www.astate.edu) for current bulletin information.
3863. Industrial Safety  An introduction of the basic concepts of safety and health. Topics include the role of the safety professional, social, legislative, and regulatory requirements as well as the concepts of hazard recognition, evaluation, and control. (D)

3873. Tool Design Application of the theory developed in the fundamental technology courses to the design and fabrication of jigs, fixtures, and dies. Corequisite: TECH 3833. (F)

3883. Machine Design Application of the theory developed in the fundamental technology courses to the design and/or selection of machine components such as journal and antifriction bearings, shafts, couplings, cams, gears, belts, chains, clutches, brakes, fasteners, and springs. Corequisite: TECH 3833. (S-odd)

3891-3. Occupational Internship This course provides the student with an opportunity to obtain additional experience in their emphasis area. Course may be repeated. Maximum degree credit for this course is three hours. Adviser's approval is required. (1-3 hours) (F, S, SU)

4783. Manufacturing Concepts and philosophies of manufacturing technology and their roles in factories. Prerequisite: Senior Standing in Technology. (S)

4801-3. Current Topics in Technology This course is designed to address specific needs of technology or industry. May be repeated for credit. (1-3 hours) (D)

4813. Operations Systems Research Quantitative techniques for decision making; break-even analysis, economic models, gaussian distributions, inventory control, production models, and mathematical programming. Prerequisite: MATH 1033. (D)

4823. Quality Assurance The principles and practices of quality in manufactured products. Familiarization with industrial methods and equipment used in quality assessment. Basic topics include histograms, Pareto diagrams, control charts, acceptance sampling, process capability, cause and effect diagrams, reliability, visual inspection, and the relationship between quality and cost. Prerequisite: TECH 3773 or TECH 2883. (D)

4833. Electric Motors Operation, installation, and troubleshooting of AC motors and electric motor control devices. Prerequisite: TECH 3803 or experience in electrical systems. (S-even)

4843. Labor Relations Course will present the economic situation in which labor-management problems operate in a technological environment. The course will cover

4853. Hydraulic and Pneumatic Systems This is a study of the basic industrial fluid power systems common to the field of automation, including basic principles, components, standards, symbols, circuits, and troubleshooting of hydraulic and pneumatic systems. Prerequisite: PHYS 2054. (D)

4863. Applied Robotics This course includes basic robotics applications operating in varied environmental conditions, servo mechanisms with respect to task and functional operations, multiple functions, programming, computer control, preventative maintenance, areas of safety, and drive configurations to provide high equipment utilization and life. (F - odd)

4873. Motion and Time Study Principles and practices of motion and time study including process charts, operation charts, motion summary, and time standards. (S-even)

4883. Work Center Management A survey course that addresses the problems of managing a small working unit (such as a department) within a larger unit, such as a company. Topics to be addressed include: goal identification; staffing needs; monitoring of work process reporting; work center communications; and interpersonal relations within the work center. (S-odd)

See the ASU web page (www.astate.edu) for current bulletin information.
College of Fine Arts
Daniel J. Reeves, Dean

The mission of the College of Fine Arts is to provide nationally recognized innovative education, performances and programming in the visual and performing arts.

Arkansas State University's College of Fine Arts is the largest college of fine arts in the state. It comprises three departments: Art, Music and Theatre. Each has its own distinctive program, yet they share important common goals: to make students more aware of our intellectual and artistic heritage, to enhance abilities to think critically, to improve skills of effective communication, and to develop the rich potential of the artistically talented.

The College of Fine Arts offers intensive performance, technical, and studio training, studies in history and theory, and certified teacher preparation. Students can major or minor in each department and there are courses specifically designed for the non-major. In addition, the college also sponsors exhibitions, plays, concerts and recitals for the benefit of the entire campus and community. The College of Fine Arts complements the basic philosophy of the university, the importance of humanity, understanding, and expression.

Department of Art

Professor Curtis Steele, Chair; Professors Allen, Carlisle, Chaffee, Keech, Rowe, Salvest; Associate Professors Pendergrass, Vickrey; Assistant Professors Coggin, Gipson; Instructors Balducci, Gill

MISSION STATEMENT

The Department of Art at Arkansas State University will provide an educational environment that fosters the creation and understanding of art.

Students in art develop insight, sensitivity, and perception toward all aspects of nature while building individual expressive responses. Aesthetic and functional values, creative ideas, and media skills are developed through instructional guidance and applied experience in the studio and classroom. Some of the courses listed here may involve field trips to Memphis Brooks Museum, The Arkansas Arts Center in Little Rock, or other regional art collections.

The Bachelor of Arts degree provides a liberal arts-fine arts education, allowing students to pursue their art interest without the additional demands and course work required by the professional BFA degree options. The BA with an art history emphasis is a suitable beginning for a student planning to work toward an advanced degree in art history.

The Bachelor of Fine Arts degree programs are designed to prepare students for professional careers as a classroom art teacher, graphic designer, or studio artist. The BFA with emphasis in Studio Art, Graphic Design, or Art Education is the initial professional degree, and it is the requisite degree for the student who plans to pursuing a studio-oriented post-baccalaureate degree. A minimum 2.75 GPA in all courses with an ART prefix is required for the BFA degree.

The Bachelor of Science in Education degree in Art Education provides academic preparation and practicum experience for students planning to teach art in the public schools. Graduates are prepared for certification at K-12 levels. (See College of Education section for details on professional education requirements.)

The degree programs are accredited by the National Association of Schools of Art and Design.

BFA/TRANSFER REVIEW POLICY

BFA review is viewed as a counseling/advising practice for all art students, and, in addition, it is an admissions screening procedure for students interested in pursuing the B.F.A.
A degree in Art. The BFA review should take place prior to the completion of spring semester Art Major Core courses.

**Transfer review** provides an opportunity for students joining us from other programs to acquire a realistic assessment of their status vis-a-vis our program. Ideally, the transfer review should occur prior to enrollment in ASU art department courses. Should the transfer student intend to enter the B.F.A. degree program, this review will serve as an admission screening process as indicated above.

### Major in Art

**Bachelor of Fine Arts**

#### General Education Requirements:
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, <em>pages 78 and 79</em></td>
<td>46-49</td>
</tr>
</tbody>
</table>

#### Specific General Education Requirements:
Students with this major must take the following:
- MUS 2503, Fine Arts-Musical
- THEA 2503, Fine Arts-Theatre

B.F.A., Art Education Emphasis students must also take the following:
- PSY 2103, Introduction to Psychology
- HIST 2773, The United States Since 1876; OR
- HIST 2773, The United States Since 1876
- POSC 2103, Introduction to United States Government

#### Major Requirements:

**Art Major Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1013, Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1023, Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 1033, Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 1043, Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 2583, Survey of Art History I</td>
<td>3</td>
</tr>
<tr>
<td>ART 2593, Survey of Art History II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Studio Art Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2013, Design III</td>
<td>3</td>
</tr>
<tr>
<td>ART 3033, Drawing III (two semesters)</td>
<td>6</td>
</tr>
<tr>
<td>ART 3033, Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 3033, Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 3033, Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 3103, Sculpture</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Emphasis Area (Select one of the two options):

**Studio Art**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Studio Emphasis Areas: Drawing/Painting, Printmaking, Photography, Ceramics, and Sculpture</td>
<td>39</td>
</tr>
<tr>
<td>Art History Electives</td>
<td>9</td>
</tr>
<tr>
<td>Senior Exhibition</td>
<td>0</td>
</tr>
</tbody>
</table>

| Total                                                        | 48        |

**Art Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARED 3803, Teaching Arts in the Elementary Grades</td>
<td>3</td>
</tr>
<tr>
<td>ARED 4783, Concepts in Art Education</td>
<td>3</td>
</tr>
<tr>
<td>Art Studio Emphasis Area</td>
<td>15</td>
</tr>
<tr>
<td>Art History Electives</td>
<td>9</td>
</tr>
<tr>
<td>ART 4330, Senior Exhibition</td>
<td>0</td>
</tr>
</tbody>
</table>

| Total                                                        | 33        |

---

### Additional General Requirements for Teacher Education:

- SCOM 1203, Oral Communication                                | 3         |
- HLTH 2513, Principles of Personal Health                     | 3         |

**Total**: 6

NOTE: The College of Education may give new numbers for SCED 2514, SCED 4515 and TIAR 4826.

---

### Professional Education Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 3703, Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SCED 3514, Introduction to Secondary Teaching</td>
<td>4</td>
</tr>
<tr>
<td>SCED 4515, Instructional Design for Secondary Education</td>
<td>5</td>
</tr>
<tr>
<td>EDAR 4523, Methods and Materials in the Teaching of Art</td>
<td>3</td>
</tr>
<tr>
<td>SCED 4713, Educational Measurement with Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>TIAR 4826, Teaching Internship in the Secondary School</td>
<td>12</td>
</tr>
<tr>
<td>SE 3643, The Exceptional Student in the Regular Classroom</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total**: 33

See the ASU web page (www.astate.edu) for current bulletin information.
### Additional Requirements:

Art History Electives (including ART 4573, History of Graphic Design) .......................................................... 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1013</td>
<td>Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1023</td>
<td>Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 1033</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1043</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 2503</td>
<td>Survey of Art History I</td>
<td>3</td>
</tr>
<tr>
<td>ART 2503</td>
<td>Survey of Art History II</td>
<td>3</td>
</tr>
<tr>
<td>ART 3073</td>
<td>Watercolor</td>
<td>3</td>
</tr>
<tr>
<td>ART 3093</td>
<td>Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 3103</td>
<td>Sculpture</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 18

### Studio Art Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1013</td>
<td>Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1033</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 3093</td>
<td>Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 3103</td>
<td>Sculpture</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 21

### Additional Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARED 3633</td>
<td>Teaching Arts in the Elementary Grades</td>
<td>3</td>
</tr>
<tr>
<td>ARED 4703</td>
<td>Concepts in Art Education</td>
<td>3</td>
</tr>
<tr>
<td>ART 3073</td>
<td>Watercolor</td>
<td>3</td>
</tr>
<tr>
<td>ART 3073</td>
<td>Watercolor Electives</td>
<td>3</td>
</tr>
<tr>
<td>Art History Electives</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

**Total** 21

### Professional Education Requirements:

* PSY 3703, Educational Psychology .......................................................... 3
* SCED 2514, Introduction to Secondary Teaching ........................................... 4
* SCED 4516, Instructional Design for Secondary Education ........................... 5
* EDAR 4523, Methods and Materials in the Teaching of Art ......................... 3
* SCED 4713, Educational Measurement with Computer Applications ................ 3
* TIA 4826, Teaching Internship in the Secondary School .............................. 12
* SE 3643, The Exceptional Student in the Regular Classroom ....................... 3

**See Bachelor of Science in Education degree-College of Education**

**Prerequisite: Admission to the Teacher Education Program**

**Total** 33

### Additional General Requirements for Teacher Education:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOM 1203</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 2513</td>
<td>Principles of Personal Health</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 6

**Total** 145

---

**Minor in Art**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1013</td>
<td>Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1033</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 2423</td>
<td>Graphic Design I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 9

---

**Minor in Art History**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2503</td>
<td>Survey of Art History I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 12

---

**Minor in Graphic Design**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1013</td>
<td>Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 1033</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 2423</td>
<td>Graphic Design I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 9

---

**General Education Requirements:**

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 ................................................. 46-49

### Specific General Education Requirements:

Students with this major must take the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 2503</td>
<td>Fine Arts-Musical</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2503</td>
<td>Fine Arts-Theatre</td>
<td>3</td>
</tr>
<tr>
<td>PSY 2013</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2763</td>
<td>The United States To 1876, OR</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2773</td>
<td>The United States Since 1876</td>
<td>3</td>
</tr>
<tr>
<td>POSC 2103</td>
<td>Introduction to United States Government</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 18

---

**General Education Requirements:**

See the ASU web page (www.astate.edu) for current bulletin information.
### Language Requirement:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Language (Two years of a high school foreign language may be used to waive six semester hours of this requirement)</td>
<td>12-6</td>
</tr>
</tbody>
</table>

*No credit awarded for courses waived. See page 332.*

### Major Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1100, Recital Attendance (6 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>MUS 1511, 1521, and 2511, MUS 2521, Aural Theory I-V</td>
<td>4</td>
</tr>
<tr>
<td>MUS 1513, 1523, and 2513, MUS 2523, Theory I-V</td>
<td>12</td>
</tr>
<tr>
<td>MUS 2502, Music History I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 3533, Piano Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 4513, Music History III</td>
<td>9</td>
</tr>
<tr>
<td><em>Music Ensemble</em></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>36</td>
</tr>
</tbody>
</table>

*Minor:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Minor must be approved by adviser)</td>
<td>18-21</td>
</tr>
</tbody>
</table>

*Electives:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Number of hours determined by courses taken in foreign language and in the minor)</td>
<td>23-14</td>
</tr>
<tr>
<td><em>Courses completed in this area must contribute to a total of 45 upper-level credits.</em></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>129</td>
</tr>
</tbody>
</table>

### General Education Requirements:

#### Major in Music

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees; pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

#### Specific General Education Requirements:

*Students with this major must take the following:

- THEA 2503, Fine Arts-Theatre
- ART 2503, Fine Arts-Visual

### Major Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1100, Recital Attendance (6 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>MUS 1511, 1521, and 2511, MUS 2521, Aural Theory I-V</td>
<td>4</td>
</tr>
<tr>
<td>MUS 1513, 1523, and 2513, MUS 2523, Theory I-V</td>
<td>12</td>
</tr>
<tr>
<td>MUS 2502, Music History I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 3233, Elementary Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4422, Composition in the Electronic Media</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4422, Elementary Orchestration and Choral Arranging</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4412, Form and Analysis</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4503 and 4513, Music History II and III</td>
<td>6</td>
</tr>
<tr>
<td>MUS 1112, (Major Applied Area) 2 semesters—lower level</td>
<td>4</td>
</tr>
<tr>
<td>MUS 3113, (Major Applied Area) 6 semesters—upper level</td>
<td>18</td>
</tr>
<tr>
<td><em>MUS 1111, (Secondary Applied Area) 4 semesters</em></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>58</td>
</tr>
</tbody>
</table>

*These requirements will be piano for voice, composition, instrumental, and organ specialists; organ for piano specialists.

#### Special Emphasis Area Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSP 3111, (Secondary Applied Area)</td>
<td>4</td>
</tr>
<tr>
<td>MUS 4513, Church Music (Organ majors only)</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4131, Senior Recital (full)</td>
<td>1</td>
</tr>
<tr>
<td>Music Electives</td>
<td>13</td>
</tr>
<tr>
<td><em>Ensembles must include 4 semesters of large ensemble plus 2 semesters of small ensemble.</em></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>131</td>
</tr>
</tbody>
</table>

### Voice Performance:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSP 3111, Piano, 2 semesters</td>
<td>2</td>
</tr>
<tr>
<td>MUS 3533, Piano Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 4151, Accompanying (Piano majors only) two semesters</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4512, Church Music (Organ majors only)</td>
<td>2</td>
</tr>
<tr>
<td>FR 1013 and 1023, Elementary French I and II</td>
<td>6</td>
</tr>
<tr>
<td>MUS 3130, Junior Recital (one-half)</td>
<td>1</td>
</tr>
<tr>
<td>MUS 3471, Opera Production</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>131</td>
</tr>
</tbody>
</table>

### Keyboard Performance:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUED 4642, Piano Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>MUS 3533, Piano Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 4151, Accompanying (Piano majors only) two semesters</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4512, Church Music (Organ majors only)</td>
<td>2</td>
</tr>
<tr>
<td>FR 1013 and 1023, Elementary French I and II</td>
<td>6</td>
</tr>
<tr>
<td>MUS 3130, Junior Recital (one-half)</td>
<td>1</td>
</tr>
<tr>
<td>Music Electives</td>
<td>13</td>
</tr>
<tr>
<td>Music Electives (Organ majors 7; Piano majors 8)</td>
<td>7-8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27-28</td>
</tr>
</tbody>
</table>

### Composition:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSP 3111, (Secondary Applied Area) 4 semesters</td>
<td>4</td>
</tr>
<tr>
<td>MUS 3533, Piano Literature</td>
<td>4</td>
</tr>
<tr>
<td>MUS 4151, Accompanying (Piano majors only) two semesters</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4512, Church Music (Organ majors only)</td>
<td>2</td>
</tr>
<tr>
<td>FR 1013 and 1023, Elementary French I and II</td>
<td>6</td>
</tr>
<tr>
<td>MUS 3130, Junior Recital (one-half)</td>
<td>1</td>
</tr>
<tr>
<td>Music Electives</td>
<td>13</td>
</tr>
<tr>
<td><em>Ensembles must include 4 semesters of large ensemble plus 2 semesters of small ensemble.</em></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>131</td>
</tr>
</tbody>
</table>

### Major in Instrumental Music

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees; pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

#### Specific General Education Requirements:

*Students with this major must take the following:

- THEA 2503, Fine Arts-Theatre
- ART 2503, Fine Arts-Visual

### Major Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1100, Recital Attendance (6 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>MUS 1511, 1521, and 2511, MUS 2521, Aural Theory I-V</td>
<td>4</td>
</tr>
<tr>
<td>MUS 1513, 1523, and 2513, MUS 2523, Theory I-V</td>
<td>12</td>
</tr>
<tr>
<td>MUS 2502, Music History I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 3233, Elementary Conducting</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4422, Composition in the Electronic Media</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4422, Elementary Orchestration and Choral Arranging</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4412, Form and Analysis</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4503 and 4513, Music History II and III</td>
<td>6</td>
</tr>
<tr>
<td>MUSP 3111, (Major Applied Area) 4 semesters—lower level</td>
<td>4</td>
</tr>
<tr>
<td>MUSP 3113, (Major Applied Area) 6 semesters—upper level</td>
<td>18</td>
</tr>
<tr>
<td><em>MUS 3111, (Secondary Applied Area) 4 semesters</em></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>58</td>
</tr>
</tbody>
</table>

### Special Emphasis Area Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSP 3111, (Secondary Applied Area)</td>
<td>4</td>
</tr>
<tr>
<td>MUS 4513, Church Music (Organ majors only)</td>
<td>2</td>
</tr>
<tr>
<td>MUS 4131, Senior Recital (full)</td>
<td>1</td>
</tr>
<tr>
<td>Music Electives</td>
<td>13</td>
</tr>
<tr>
<td><em>Ensemble must include 4 semesters of Wind Ensemble, Symphonic Band, or Orchestra.</em></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
MUS 3232, Elementary Conducting ......................................................... 2
MUS 3252, Choral Conducting ................................................................. 2
MUS 4422, Composition in the Electronic Media ..................................... 2
MUS 3422, Elementary Orchestration and Choral Arranging ................. 2
MUS 4503, Music History II ................................................................. 3
MUS 4513, Music History III ............................................................... 3
EDMU 4612, Methods and Materials for Teaching Vocal Music in the Middle Grades ......................................................... 3
MUS 1112, (Major Applied Area) 3 semesters lower level ....................... 6
MUS 3112, (Major Applied Area) 4 semesters upper level ..................... 8
MUS 1111, (Secondary Applied Area) 1 semester .................................. 1
MUS 1381, 3351, 3361, 4301, University Singers, OR ......................... 1
MUS 1351, 2351, 4351, Concert Choir ................................................... 7

* See Bachelor of Science in Education degree-College of Education ....... 33
** Prerequisite: Admission into the Teacher Education Program

Professional Education Requirements:*  
** Sem. Hrs.
* PSY 3703, Educational Psychology .................................................. 3
** SCED 3515, Performance Based Instructor Design ........................... 5
** EDMU 4643, Methods and Materials for Teaching Vocal Music ........ 3
** SCED 4713, Educational Measurement with Computer Applications ... 3
**  TMIU 4826, Teaching Internship in the Secondary School ................. 12
SE 3643, The Exceptional Student in the Regular Classroom ................ 3

** See Bachelor of Science in Education degree-College of Education ....... 33

Additional General Requirements for Teacher Education#:  
** Sem. Hrs.
HLTH 2513, Principles of Personal Health ......................................... 3
PE Activity Elective ............................................................................ 1

Total .............................................................................. 4

#Students must pass an oral communication exam before admittance into the Teacher Education Program. Students who fail the exam must take SCOM 1203, Oral Communication, to remove the deficiency.

---

Major in Vocal Music
Bachelor of Music Education

General Education Requirements:  
** Sem. Hrs.
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .......................................................... 46-49

Specific General Education Requirements:  
Students with this major must take the following:  
THEA 2503, Fine Arts-Theatre .......................................................... 3
ART 2503, Fine Arts-Visual .................................................................. 3
PSY 2013, Introduction to Psychology .................................................. 3
HIST 2793, The United States Since 1875 OR HIST 2773, The United States Since 1875 .................................................. 3
POSC 2103, Introduction to United States Government ....................... 3

Major Requirements:  
** Sem. Hrs.
MUS 1100, Recital Attendance (6 semesters) ...................................... 0
MUS 1511, 1521, and 2511, MUS 2521, Aural Theory I-IV ................. 4
MUS 1513, 1523, and 2513, MUS 2523, Theory I-IV ......................... 12
MUS 2231, String Instrument Techniques .......................................... 1
MUS 2262, Music History I ................................................................. 2
MUS 3211 and 3221, Diction I and II ..................................................... 2

See the ASU web page (www.astate.edu) for current bulletin information.
### Major in Theatre

**Bachelor of Fine Arts**

#### General Education Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

#### Specific General Education Requirements:

- **BFA Theatre students must take:**
  - MUS 2503, Fine Arts-Musical
  - ART 2503, Fine Arts-Visual

#### Major Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sems. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 1203</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 1213</td>
<td>Beginning Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2223</td>
<td>Fundamentals of Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2233</td>
<td>Stage Makeup</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2243</td>
<td>Stage Costume Construction</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2223</td>
<td>Studio in Dramatic Literature</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3252</td>
<td>Theatre Laboratory</td>
<td>12</td>
</tr>
<tr>
<td>THEA 4203</td>
<td>Stage Directing I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4263 and THEA 4273</td>
<td>History of the Theatre I and II</td>
<td>6</td>
</tr>
<tr>
<td>THEA 4383</td>
<td>Senior Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 42 Sem. Hrs.

#### Emphasis Area (Select one of the four options):

##### Acting:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sems. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 2213</td>
<td>Creative Improvisation</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2203</td>
<td>Voice and Movement for Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3213</td>
<td>Audition Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3233</td>
<td>Stage Combat</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3263</td>
<td>Acting Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3273</td>
<td>Voice and Movement for Theatre II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4213</td>
<td>Acting on Camera</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4253</td>
<td>Theatre Management</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4283</td>
<td>Period Styles in Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4333</td>
<td>Advanced Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4343</td>
<td>Musical Theatre</td>
<td>3</td>
</tr>
<tr>
<td>MUS 1111</td>
<td>Voice</td>
<td>1</td>
</tr>
<tr>
<td>Electives (adviser approval required)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 38 Sem. Hrs.

---

### Design Technology:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sems. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 1213</td>
<td>Beginning Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2223</td>
<td>Fundamentals of Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2233</td>
<td>Stage Makeup</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4253</td>
<td>Stage Costume Design</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4243</td>
<td>Stage Costume Design</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4253</td>
<td>Theatre Management</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4303</td>
<td>Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4373</td>
<td>Special Problems: Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4413</td>
<td>Sound Design and Production for the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2003</td>
<td>Voice and Movement for Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2363</td>
<td>History of Costumes</td>
<td>3</td>
</tr>
<tr>
<td>Electives (adviser approval required)</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Total: 38 Sem. Hrs.

### Directing:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sems. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 2003</td>
<td>Voice and Movement for Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2533</td>
<td>Stage Management</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3213</td>
<td>Audition Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3233</td>
<td>Stage Combat</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3333</td>
<td>Play Analysis</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3623</td>
<td>Acting Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4223</td>
<td>Scenic Design</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4253</td>
<td>Theatre Management</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4243</td>
<td>Stage Costume Design</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4283</td>
<td>Period Styles in Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4303</td>
<td>Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4323</td>
<td>Stage Directing II</td>
<td>3</td>
</tr>
<tr>
<td>Electives (adviser approval required)</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Total: 38 Sem. Hrs.

### Musical Theatre:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sems. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1211</td>
<td>Elementary Piano I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 1212</td>
<td>Elementary Piano II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 1403</td>
<td>Music Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 1413</td>
<td>Theory I</td>
<td>12</td>
</tr>
<tr>
<td>MUS 1112-9112</td>
<td>Voice</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2113</td>
<td>Creative Improvisation</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3213</td>
<td>Audition Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THEA 3243</td>
<td>Musical Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEA 4371</td>
<td>Special Problems: Dance</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 38 Sem. Hrs.

### Minor in Theatre

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Sems. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 1213</td>
<td>Beginning Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEA 1223</td>
<td>Fundamentals of Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>THEA 2333</td>
<td>Stage Makeup</td>
<td>3</td>
</tr>
<tr>
<td>Upper Division Theatre Electives (no more than 4 hours of lab and no more than 6 hours of summer theatre)</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Total: 21 Sem. Hrs.

See the ASU web page (www.astate.edu) for current bulletin information.
COLLEGE OF FINE ARTS COURSE DESCRIPTIONS

DEPARTMENT OF ART

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Fine Arts (ART)

2503. Fine Arts-Visual  Introduction to visual art for all students regardless of background or experience. The purpose is to develop cognitive and experiential responses to works of art. (F, S, SU)

Studio Art (ART) (Special course fees may apply.)

It is expected that students will spend a minimum of three additional clock hours per week on work outside the scheduled class time for each studio class. Additionally, the Art Major Core (ART 1013 Design I, ART 1023 Design II, ART 1033 Drawing I, ART 1043 Drawing II, ART 2583 Survey of Art History I, ART 2893 Survey of Art History II) must be completed prior to the BFA Review. Students enrolled in the BFA programs must pass the BFA Review prior to enrollment in 4000 ART courses.

1013. Design I  Fundamental principles of design and the theory of color. (F, S)

1023. Design II  Three-dimensional design principles. Students work toward developing an understanding of the basic vocabulary and principles of three-dimensional design. Formal and conceptual decision-making skills are developed through fundamental exercises in additive, subtractive, substitute, and constructive processes. Prerequisites: ART 1013 and 1033. (F, S)

1033. Drawing I  This is the beginning drawing course. Students work on developing observation and the discovery of form from both real and imagined sources. Various materials and techniques are used to develop the technical means of expression. Drawings are in the form of exercises using life models (clothed), still life, landscape, and imagined sources. Basic concepts of professional art ideals and practices. (F, S, SU)

1043. Drawing II  Continuation of ART 1033. Students become more skilled with visual elements and drawing principles. A broader range of materials and techniques will be used. Subject matter will include still life, life models (undraped), landscape, and imagined subjects. Prerequisite: ART 1033. (F, S, SU)

1063. Elective Painting for Nonmajors  Introductory color and composition for painting with opportunities for the student to explore personal interests. (may be repeated for credit; however, no more than 3 hours may be applied toward a degree in fields other than art) (F, S)

1073. Elective Fine Art Photography for Nonmajors  This course offers an introduction to photography as a means of personal expression. Basic exploration of camera operations, film development, photographic printing processes and discussion of aesthetic issues will be covered. (May be repeated for credit; however, no more than 3 hours may be applied toward a degree in fields other than art) (F -odd)

1083. Elective Printmaking for Nonmajors  Basic techniques in creating original designs in hand printing processes. Students may work into etching, silkscreen, or wood block prints. (may be repeated for credit; however, no more than 3 hours may be applied toward a degree in fields other than art) (F, S)

1093. Elective Ceramics for Nonmajors  Basic exploration of techniques of clay manipulation including the use of the potter’s wheel. Lab assistants will fire selected pieces. (may be repeated for credit; however, no more than 3 hours may be applied toward a degree in fields other than art) (F, S)

1133. Elective Drawing for Nonmajors  Introductory figure drawing and object drawing, including principles of perspective. (may be repeated for credit; however, no more than 3 hours may be applied toward a degree in fields other than art) (F, S, SU)

1703. Elective Crafts for Nonmajors  Basic exploration of traditional craft areas. Textiles, papermaking, basketry, and other craft media will be included. (may be repeated for credit; however, no more than 3 hours may be applied toward a degree in fields other than art) (D)

2013. Design III  Two-dimensional design principles. Further development in design, including research in the theory of color and the organization of two-dimensional space. Prerequisites: ART 1013 and 1033. NOTE: ART 1023 is not a prerequisite for this course. (F, S)

2453. Visual Thinking  Focuses on the process of lateral thinking and the visualization of design problems and their solutions. Emphasizes effective research, imagination, originality, and execution in various media. Prerequisite: ART 1033, ART 1013 or by permission of instructor. (S)

3033. Drawing III  Continuation of development of drawing skills and concepts. Students at this level should have well developed drawing skills and good understanding of drawing principles. Life models (undraped) will be provided when available. Prerequisites: ART 1013, ART 1023, ART 1033 and 1043, ART 2583, ART 2593. (F, S, SU)

3063. Painting  Introduction to composition and techniques in painting media. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2583, ART 2593. (F, S)

3073. Watercolor Painting  Emphasis on the development of composition and techniques with transparent watercolor media. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2583, ART 2593. (May be repeated for credit) (F)

3083. Printmaking  Covers intaglio, relief, silkscreen, lithography and contemporary printmaking techniques. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2583, ART 2593. (May be repeated for credit) (F, S)

3093. Ceramics  Introduction to ceramic materials and techniques, wheel-thrown and handbuilt form. Glazing and firing undertaken. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2583, ART 2593. (May be repeated for credit) (F, S)

3103. Sculpture  Studio practice and experimentation in three-dimensional design. Clay, wood, metal, and other materials are used. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2583, ART 2593. (F, S)

3333. Professional Relations for Artists  Concepts and practices used in exhibiting, marketing and promoting the artist and the artist’s creative work. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2583, ART 2593. (S)

3403. Photography  An introductory study of photographic equipment, techniques, and processes. Requires three hours of lab per week. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2583, ART 2593. (F)

4033. Advanced Drawing  Working from various subject matter, emphasizing the figure model in different media. Experimental studies in composition and technique. Prerequisites: ART 3033 and passing the BFA Review for students in BFA programs. (may be repeated for credit) (F, S)

See the ASU web page (www.astate.edu) for current bulletin information.
4063. **Advanced Painting** Individual work for advanced students. Prerequisites: Permission of the instructor and passing the BFA Review for students in BFA programs. (may be repeated for credit) (F, S)

4083. **Advanced Printmaking** Continuation of Printmaking 3083. Prerequisites: ART 3083, and passing the BFA Review for students in BFA programs. (may be repeated for credit) (F, S)

4093. **Advanced Ceramics** Continuation of ceramics work. Independent projects for advanced students. Prerequisite: Permission and passing the BFA Review for students in BFA programs. (may be repeated for credit) (F, S)

4103. **Advanced Sculpture** Continuation of sculpture work with emphasis on development of personal direction. Prerequisite: Permission of instructor, and passing the BFA Review for students in BFA programs. (may be repeated for credit) (F, S)

4330. **Senior Exhibition** Capstone course required for all graduating BFA Studio Art emphasis students. Prerequisite: Minimum GPA of 2.75 in all work with an ART prefix and ARTH prefix, permission of advisor, instructor, and department chair, and passing the BFA Review for students in BFA programs. (F, S, SU)

4351-2-3. **Studio Problems** An opportunity for the studio-oriented student to explore and develop techniques and concepts in both two- and three-dimensional media. Areas not covered by other existing studio courses will be emphasized. Prerequisites: ART 1013, ART 1023 and 1043, ART 2583, ART 2593, and permission of advisor, instructor, and department chair, and passing the BFA Review for students in BFA programs. (may be repeated for credit) (F, S, SU)

4443. **Photography as a Fine Art I** Advanced studies of photographic equipment, techniques and processes with emphasis on personal expression. Requires three hours of lab per week. (may be repeated for credit) Prerequisite: ART 1013, ART 1023, ART 1033, ART 1043, ART 2013, ART 2423, ART 2433, ART 3403, and passing BFA review for students in BFA programs, or previous photographic experience with instructors permission. (F)

4453. **Photography as a Fine Art II** Advanced studies in photography as fine art; includes silver- and non-silver-based processes with emphasis on aesthetic expression. Prerequisite: ART 4443. (F -even)

4661. **Senior Thesis** A written project required of all B.A. candidates with an emphasis in Studio Art or Art History; to be completed in the final semester. (F, S, SU)

**Graphic Design (ART)**

It is expected that students will spend a minimum of three additional clock hours per week on work outside the scheduled class time for each studio (Graphic Design) class. Additionally, the Art Major Core (ART 1013 Design I, ART 1023 Design II,ART 1043 Drawing I,ART 1043 Drawing II, ART 2583 Survey of Art History I, ART 2593 Survey of Art History II) must be completed prior to the BFA Review. Students enrolled in the BFA programs must pass the BFA Review prior to enrollment in 4000 level ART courses.

2413. **Graphic Design I** Basic principles of typography, printing processes, design and visual communication as they relate to graphic design. Prerequisite: ART 1013. (F)

2423. **Graphic Design II** Introduction to the design process as applied to graphic design with special emphasis on methods, materials, and practices of the design studio. Includes preparation of art work for presentation and reproduction. Prerequisite: ART 2413. (S)

2433. **Digital Photography I** This course offers an introduction to photography as it can be used in digital media. Basic camera operation and computer based digital imaging and design applications will be covered. Prerequisite: ART 1013 Design I for art majors.

2443. **Introduction to Digital Design** This course will instruct students in the design and implementation of multimedia presentations, interface design and other computer-based media design. Prerequisites: FAV 2502, FAV 2503 or ART 2503 (non-majors), ART 1013 (art majors), or instructor's permission. (F -even)

3413. **Graphic Design III** Color principles and techniques for graphic design presentations and preparation of artwork for reproduction. Various color systems, applications and rendering techniques using traditional media and the computer will be covered. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2013, ART 2423, ART 2583, and ART 2593. (F)

3423. **Package Design** Structure, color, and graphics and creative application to the field of packaging. Designing of three-dimensional containers and displays. Prerequisite: ART 1013, ART 1023, ART 1033, ART 1043, ART 2013, ART 2423, ART 2583, and ART 2593. (may be repeated for credit) (F)

3433. **Illustration I** Introduction to illustration methods, materials and techniques. Prerequisites: ART 1013, ART 1023, ART 1033, ART 1043, ART 2583, ART 2593, and either 3063 or 3073. (F, S)

3443. **Graphic Design IV** Various letter styles and the creative application of measuring systems, copy preparation, and history. The emphasis will be on aesthetic discrimination. Prerequisites: ART 3413. (may be repeated for credit) (S)

3673. **Seminar in Digital Media and Design** A study of the development and impact of digital media. (Also listed as RTV 3673). (S)

4363. **Graphic Design Internship** Supervised work in a professional graphic design setting. Prerequisite: consent of department chair, and passing the BFA review for students in BFA program. (F, S, SU)

4403. **Photography for the Graphic Designer I** Study of photographic equipment, techniques and processes with emphasis on graphic design applications. Requires three hours of lab per week. (may be repeated for credit) Prerequisite: ART 2423, and passing the BFA review for students in the BFA programs. (S -even)

4413. **Photography for the Graphic Designer II** This course offers advanced studies in photography as it is utilized in graphic design. Advanced studies in studio and site photography and the application of photography to print and digital media. Prerequisite: ART 4403 and passing the BFA review for students in BFA program. (S -even)

4423. **Graphic Design V** Continued application of the design problems with a special emphasis on idea development and presentation techniques. (may be repeated for credit) Prerequisite: ART 3413 and passing the BFA review for students in BFA program. (F)

4433. **Illustration II** Advanced studies in various illustrative materials and techniques including computer applications. (may be repeated for credit) Prerequisite: ART 3433 and passing the BFA review for students in BFA program. (F, S)

4463. **Advanced Digital Design** This course will offer students advanced instruction in the design and implementation of multimedia presentations, interface design and other computer-based media design. Prerequisite: ART 2443 and passing the BFA review for students in BFA program. (S -odd)

See the ASU web page (www.astate.edu) for current bulletin information.
Art History (ARTH)

2583. Survey of Art History I General investigation of the historical development of art from prehistoric periods to the Renaissance. (F, S)

2593. Survey of Art History II Continuation of ART 2583, covering the period from the Renaissance to the Modern period. (F, S)

3503. History of Photography History, aesthetics, and appreciation of photography. Prerequisites: ARTH 2583, ARTH 2593 for Art majors. (Also listed as JOUR 4093) (S - odd, SU - even)

3513. History and Museums An introduction to the background and nature of museums and the use of the resources of museums for the study of history. (D)

3523. Ancient and Classical Art History A survey of art from the earliest civilizations of the Near East through the Roman empire. Prerequisites: ARTH 2583, ARTH 2593 for Art majors. (F - even)

3533. Renaissance Art History Artists, styles, and development of art during the Renaissance Period in Italy and northern Europe. Prerequisites: ARTH 2583, ARTH 2593 for Art majors. (F - odd)

3543. Modern Art History Important periods, styles, and artists, from the nineteenth century to the present. Prerequisites: ARTH 2583, ARTH 2593 for Art majors. (F - even, SU - odd)

3563. Baroque and Rococo Art Artists, styles, and developments of Baroque and Rococo Art immediately following the Renaissance. Prerequisites: ARTH 2583, ARTH 2593 for Art majors. (S - even)

3573. History of Graphic Design An historical overview of visual communication from the origins of printing and typography, through the impact of industrial technology, to the development of modern graphic design. Prerequisites: ARTH 2583, ARTH 2593 for Art majors. (S - odd)

3583. History of Non-Western Art Introduction to the visual arts and cultures of non-European peoples. Specific focus will vary depending upon student interest and instructor's expertise. Prerequisites: ARTH 2583, ARTH 2593 for Art majors. (F - even)

4301-2-3. Studies in Art History Individual directed study and investigation of pertinent areas in the history of art. Prerequisites: ARTH 2583, ARTH 2593 and passing the BFA Review for students in BFA programs. May be repeated. (D)

4513. Methodology in the History and Criticism of Art Directed research methods for students of the visual arts. Written reports and oral presentations concerning both methodology and results of research. Prerequisites: ARTH 2583, ARTH 2593 and passing the BFA Review for students in BFA programs. (D)

4533. Early Christian through Gothic Art History Formation and development of art from the early Christian through the Gothic period. Prerequisites: ARTH 2583, ARTH 2593 and passing the BFA Review for students in BFA programs. (S - odd)

Art Education (ARED) (Special course fees may apply.)

3702. Art for the Classroom Teacher Planning and developing creative art programs and art appreciation for the elementary grades. Prerequisite: 30 semester hours (including ART 2583 or ART 2593 for art majors). (F, S, SU)

3753. Crafts for Teachers Introduction to traditional craft media and their implementation into the public school art classroom. Media areas include textiles, fibers, glass, clay, and other materials. Prerequisite: ART 1013 and ART 1033. (D)

3803. Teaching Art in the Elementary Grades Techniques and strategies for teaching visual art to children in the elementary grades, developing an art curriculum, and learning to assess children's artwork are the focus of this course. Prerequisite: 30 semester hours completed. (S)

4703. Concepts in Art Education A study of historical and contemporary philosophical concepts in art education. Prerequisite: Acceptance into a teacher education program. (S)

4753. Special Problems in Art Education Independent study of approved topics in Art Education. (may be repeated for credit) Prerequisite: Permission of professor. (D)

DEPARTMENT OF MUSIC

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Fine Arts (MUS)

2503. Fine Arts-Musical An introduction to music for the listener who has had no formal training or experience. The purpose is to develop listening skills. Three lecture periods per week. (F, S, SU)

Performance—Applied Music (MUSP)

Applied Music Special Fees

Applied music fees: $35 per semester—1 hour credit

Applied music fees: $55 per semester—2 or more hours of credit

The following policy governs applied music study:

1 hour credit: One half-hour lesson per week. Five hours practice required.

2 hours credit: Two half-hour lessons, or one 1-hour lesson per week. Ten hours practice required.

3 hours credit: Two half-hour lessons, or one 1-hour lesson per week. Fifteen hours practice required. (Available only to Bachelor of Music degree candidates.)

1111-2-3. May be repeated for credit as needed. (F, S, SU)

3111-2-3. May be repeated for credit as needed. (F, S, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
Performance Courses

Music Performance (MUSP)

1100. Recital Attendance  All music majors are required to attend a specified number of campus concerts and recitals. (F, S)

3130. Junior Recital (one-half) (F, S)

4131. Senior Recital (F, S)

4141. Piano Chamber Music  For advanced pianists. Experience with two-piano literature. (D)

4151. Accompanying  For advanced pianists. Prerequisite: Permission of instructor. (may be repeated for credit) (D)

4161. Pedagogy and Performance  The study of the literature and pedagogical techniques as related to performance. Prerequisite: MUS 3123 or permission of the instructor. (may be repeated for credit) (F, S, SU)

Performance Courses—Group Instruction (MUS) (Special course fees may apply.)

1211. Elementary Piano  Beginning piano class. Two laboratory periods per week. (F, S, SU)

1221. Elementary Piano II  Continuation of beginning piano class. Two laboratory periods per week. Prerequisite: MUS 1211 or permission of instructor. (S)

1231. Guitar Class I  Open to all ASU students. An introductory course to learning the fundamentals of guitar playing. The course will focus on learning basic chords, conventional strumming techniques and finger picking, and notes in first position as well as the general technique of guitar playing. (F)

1241. Guitar Class II  Open to all ASU students who have completed Guitar Class I. Prerequisite: MUS 1231. May be repeated for credit. (S)

2211. Intermediate Piano I  A continuation of MUS 1221. Two laboratory periods per week. Prerequisite: MUS 1221 or permission of instructor. (F)

2221. Intermediate Piano II  Continuation of MUS 2211. Prerequisite: MUS 2211 or permission of instructor. (S)

2231. String Instrument Techniques  Class instruction in string instrument performance. Two laboratory periods per week. (F, S)

3211. Diction for Singers I  Fundamentals of proper pronunciation of German, French, and Italian using the International Phonetic Alphabet. Two laboratory periods per week. Prerequisite: Permission of instructor. (F)

3221. Diction for Singers II  Continuation of Diction I. Two laboratory periods per week. Prerequisite: MUS 3211 or permission of instructor. (S)

3231. Flute and Saxophone Techniques  Class instruction in performance and pedagogy. Two laboratory periods per week. (F -odd)

3232. Elementary Conducting  Fundamental baton technique development and interpretation of the musical score. Three class meetings per week. (F)

3241. Double Reed Techniques  Class instruction in performance and pedagogy. Two laboratory periods per week. (F -even)

3242. Instrumental Conducting  Intensive study of instrumental scores, baton techniques, and rehearsal procedures involved in conducting instrumental ensembles. Three class meeting per week. (S)

3251. Clarinet Techniques  Class instruction in performance and pedagogy. Two laboratory periods per week. (S)

3252. Choral Conducting  Intensive study of conducting techniques and the problems in rehearsal and performance of choral literature of all styles, historical periods and special voicings. Three class meetings per week. (S)

3261. Trumpet Techniques  Class instruction in performance and pedagogy. Two laboratory periods per week. (F)

3271. Horn and Low Brass Techniques  Class instruction in performance and pedagogy. Two laboratory periods per week. (S)

3281. Percussion Instrument Techniques  Class instruction in performance and pedagogy. Two laboratory periods per week. (S)

4211. Inservice Training  Practical experience as an apprentice in a local church music program. (for Sacred Music majors only) (D)

4221. Inservice Training  Practical experience as an apprentice in a local church music program. Continuation of MUS 4211. Prerequisite: MUS 4211.

Small Ensembles (MUS)

3371. Small Ensemble (Non-credit 3370)  Vocal, woodwind, brass, handbell, guitar, and percussion performance ensembles. Periodic tours. Prerequisite: Permission of instructor. (may be repeated for credit) (F, S)

3381. Jazz Ensemble (Non-credit 3380)  A performing ensemble designed to study a wide variety of jazz music including swing, progressive, modern, and rock styles. Periodic tours. Membership by audition only. (may be repeated for credit) (F, S)

Large Ensembles—Choral and Instrumental (MUS) (Special course fees may apply.)

NOTE: Large ensemble course numbers may be repeated for credit.

1311  2311 , 3311 , 4311 , (Non-credit 1310, 2310, 3310, 4310).  Wind Ensemble

(Fall Term)  Membership is open to all university students by audition on specified prepared materials and sight-reading during the first week of the fall semester. Rehearsals are held MWF from 12 to 1:00 p.m. The wind ensemble usually performs two scheduled concerts, with possible tours. (F, S)

1321  2321 , 3321 , 4321 , (Non-credit 1320), 2320, 3320, 4320).  Wind Ensemble

(Spring Term)  A select group of 65 to 70 musicians which performs during the spring semester. Membership in this group is by audition only. These auditions are usually held during the last few weeks of the fall semester over specified prepared material, and sight-reading. Rehearsals are held MTWTh from 4:30 to 5:30 p.m. The Wind Ensemble performs scheduled concerts and takes a tour of state and regional high schools. (S)

1331  2331 , 3331 , 4331 , (Non-credit 1330, 2330, 3330, 4330).  Symphonic Band

(Spring Term)  Open to all university students without audition. This group rehearses MWTh from 3:30 to 4:30 p.m. during the spring term and performs two scheduled concerts. (S)
1341 2341, 3341, 4341, (Non-credit 1340, 2340, 3340, 4340). Marching Band Membership is open to all interested university students. This group performs at all regular and post season home football games with some travel to away games. Rehearsals are held MTWThF from 3:30 to 5:00 p.m. during the football season. (Mandatory pre-school rehearsals held week prior to registration.) (F) (S)

1351. 2351, 3351, 4351, (Non-credit 1350, 2350, 3350, 4350). Concert Choir Open to all university students by audition, consists of scheduled concerts and possible tours. (F, S)

1361. 2361, 3361, 4361, (Non-credit 1360, 2360, 3360, 4360). University Singers Open to all university students by audition, consists of scheduled concerts and possible tours. (F, S)

3391. Laboratory Band A large ensemble which allows participation by major students on secondary instruments. Emphasis on easy to medium grade band literature as it applies to high school performance. Provides conducting experience for students enrolled in conducting classes. (may be repeated for credit.) (S)

3471. Opera Production A course in the study and performance of selected opera literature. Prerequisite: Permission of instructor. (may be repeated for credit.) (S)

3481, 3480. Orchestra A large ensemble providing experience in the performing of selected string orchestra music including Baroque, Classical, Romantic, and 20th century style. Enrollment by permission of instructor. (may be repeated for credit.) (F, S)

Basic Music—Theory (MUS)

1251. Elementary Voice Class and Sight-Singing A class for all music majors designed to teach basic vocal techniques and the skill of sight-singing using solfeggio. Must be taken during the first year of enrollment as a music major. Offered only in the fall semester.

1403. Music Fundamentals The elements of music beginning with the properties of sound; continuing through triads. No previous musical training necessary. Open to all university students. May be used as a preparatory course for Music Theory I. (D)

1511. Aural Theory I Training in oral perception and the basic skills of sight singing. Two class periods per week. (F)

1513. Theory I Basic fundamentals of music with emphasis on notation of pitch and rhythm. Studies in the construction of scales, intervals, key signature and simple diatonic melodies. No previous musical experience necessary. Open to all university students. (F)

1521. Aural Theory II Continued training in aural and sight singing skills with emphasis on diatonic melody and harmony. Two class periods per week. Prerequisite: Grade of ‘C’ or better in Aural Theory I. (S)

1523. Theory II Diatonic harmony with emphasis on music practices of the 16th and 17th centuries. Prerequisite: Grade of ‘C’ or better in Theory I. (S)

2511. Aural Theory III Continued training in aural and sight singing skills with emphasis on extended tonal and atonal practices. Two class periods per week. Prerequisite: Grade of ‘C’ or better in Aural Theory II. (F)

2513. Theory III Chromatic harmony, basic music forms and analysis with emphasis on music of the 18th and 19th centuries. Prerequisite: Grade of C or better in Theory II. (F)

2521. Aural Theory IV Continued training in aural and sight singing skills with emphasis on extended tonal and atonal practices. Two class periods per week. Prerequisite: Grade of ‘C’ or better in Aural Theory III. (S)

2523. Theory IV Advanced tonal and atonal practices of music from the late 19th and 20th centuries through analysis. Prerequisite: Grade of ‘C’ or better in Theory III. (S)

3422. Elementary Orchestration and Choral Arranging Acoustical and expressive uses of orchestral instruments and voices. Prerequisite: Grade of C or better in MUS 2413 and MUS 2411. (F)

4412. Form and Analysis Analysis of basic and larger forms of music. (D)

4422. Composition in the Electronic Media Original composition to include the writing of small musical forms. Emphasis on instruction in composition using synthesizers, samplers, and computers. Prerequisite: Grade of C or better in MUS 3422. (S)

4433. Improvisation of Jazz and Popular Music Fundamental techniques of improvising with emphasis on melodic and rhythmic principles. (D)

Basic Music—Music History and Literature (MUS)

(Prerequisite: 2 semesters of theory or permission of instructor)

2502. Music History I A brief study of the vital aspects of musical style, plus an overview of the six major stylistic periods of music history, and a study of Medieval music. (F, S)

3523. Song Literature Baroque, Classical, Romantic, and Twentieth-century song literature with special emphasis on style and level of difficulty. (D)

3533. Piano Literature Baroque, Classical, Romantic, and twentieth century piano music with special attention to style and level of difficulty. (D)

4161-2-3. Special Problems in Music Independent study of approved topics for juniors and senior arranged in consultation with a professor. (must have departmental approval) (F, S, SU)

4503. Music History II A study of the music of the Renaissance, Baroque, and Classical eras. Prerequisite: Grade of “C” or better in MUS 2502. (F, SU -even)

4512. Church Music A study of the music of the Christian Church with an emphasis on the historical and philosophical aspects. May be substituted for History I and II by BME and BM performance candidates. (D)

4513. Music History III A study of the music of the Romantic era to the present. Prerequisite: Grade of “C” or better in MUS 2502. (S, SU -odd)

4543. History of Jazz Study of jazz from its beginning to the present. No prerequisite. Open to nonmusic majors. (D)

Music Education (MUED)

3612. Music and Methods for the Classroom Teacher Development of procedures, skills, and approaches to the music program for the elementary classroom. (for nonmusic majors only) (F, S, SU)

4613. Methods and Materials for Teaching Vocal Music in the Middle Grades Development of procedures, skills, and approaches to teaching general and choral music in grades 4-8.

4823. Music in the Elementary School Current philosophies and practices in curriculum planning for the elementary school music program. (music majors only) (F)

4833. Music Recording Techniques Music recording techniques designed for the music educator. Special emphasis on essential electronic equipment, its use and maintenance. (D)

See the ASU web page (www.astate.edu) for current bulletin information.
4642. Piano Pedagogy  Methods and materials of teaching piano. Prerequisite: permission of instructor. (D)

4651. Instrument Repair  Techniques for maintenance and minor repair of wind instruments. (S)

4661-2-3. Special Problems in Music Education  Independent study of approved topics for juniors and seniors arranged in consultation with a professor. (must have departmental approval) (F, S, SU)

DEPARTMENT OF THEATRE

The university reserves the right to change course scheduling when circumstances dictate such changes.

Fine Arts (THEA)

2503. Fine Arts-Theatre  Provides student with an appreciation of how various artistic elements combine to produce theatrical productions. (F, S, SU)

Theatre (THEA)

1203. Introduction to Theatre  Basic principles of theatrical traditions and terminology. (F)

1213. Beginning Acting  Basic theories and techniques of the art of acting. (may be repeated once, depending on progress) (F, S)

1223. Principles of Stage Design  An exploration of the basic elements of design that are used to create the visual theatrical environment. (S -odd)

2203. Voice and Movement for Theatre I  (may be repeated with faculty consent) (F)

2213. Creative Improvisation  (may be repeated depending on progress) Examines the actor's physical, vocal, and psychological potential to create a clear and simple characterization without a written script. (S)

2223. Fundamentals of Stagecraft  Techniques of constructing, painting, and rigging scenic units. (S)

2233. Stage Makeup  Basic principles of applying stage makeup. (S)

2243. Stage Costume Construction  Basic principles of stage costume construction. (F)

2252. Introduction to Dance Styles  Introduction to the basic fundamentals of dance language, and execution of fundamental dance techniques including those of ballet, jazz, tap, and musical theatre dance. Warm-up, stretching, jumps, turns, across-the-floor and various combinations will be practiced. (F-even)

2253. Stage Management  Principles and practices of stage management.

2262. Tap Dancing  An introduction to tap dance techniques emphasizing fundamentals of body placement, vocabulary, and styles in tap. Students will be taught dance combinations to enhance technical skills, memory and performance qualities. (S-even)

2263. History of Costumes  An in-depth study of the clothing styles of western civilization from 5 BC to the present. (F-even)

3203. Motion Picture Appreciation  Movies as a work of art and a form of persuasion. (F, S)

3213. Audition Techniques  Preparation and execution of audition material. (May be repeated with faculty consent) Prerequisite: THEA 1213. (F)

3223. Studies in Dramatic Literature  A reading introduction to plays and playwrights spanning from Greek to contemporary works. (F -even)

3233. Play Analysis  How playwrights achieved characterization, structure, and plot. (S -even)

3243. Stage Combat  Movement and combat techniques for the stage. May be repeated with consent of faculty. Prerequisite: THEA 2213. (S -odd)

3252. Theatre Laboratory  Work on productions. Required of all Theatre Arts majors during every semester (except freshman semesters). (F, S)

3263. Acting Shakespeare  A thorough investigation of the acting techniques specific to performing Shakespeare through scene and monologue work. Prerequisite: THEA 1213. (S -odd)

3273. Voice and Movement for Theatre II  Incorporation of vocal techniques in acting styles; emphasis on vocal flexibility. (may be repeated with faculty consent.) Prerequisite: THEA 2203. (S -odd)

4203. Stage Directing I  Directing techniques for theatrical productions. Prerequisite: THEA 2213 or consent of instructor. (F)

4213. Acting on Camera  Developing skills for performance in front of and for the television and film camera. (S -odd)

4223. Scene Design  Principles of theatrical design. Prerequisite: THEA 2223 or consent of instructor. (S -odd)

4233. Advanced Makeup Design  Hair styling and makeup design. Prerequisite: THEA 2233 or consent of instructor. (F -even)

4243. Stage Costume Design  The exploration of the history and design of costumes through a variety of projects. Prerequisite: THEA 1223 or consent of instructor. (S-even)

4253. Theatre Management  Study of the fundamentals of financial, promotional and regulatory procedures governing theatre management (S -odd)

4263. History of Theatre I  From the Greek Period to the Renaissance Period. (F -odd)

4273. History of Theatre II  From the Renaissance Period to the Modern Period. (S -even)

4283. Stage Lighting  Principles and practices of stage lighting and sound. Prerequisite: THEA 2223 or consent of instructor. (F -even)

4293. Creative Playmaking for Children  Creative dramatics for children. (SU)

4303. Stage Lighting  Principles and practices of stage lighting and sound. Prerequisite: THEA 2223 or consent of instructor. (F -even)

4313. Audition Techniques  Preparation and execution of audition material. (May be repeated with faculty consent) Prerequisite: THEA 1213. (F)

4323. Studies in Dramatic Literature  A reading introduction to plays and playwrights spanning from Greek to contemporary works. (F -even)

4333. Advanced Acting  Further studies in style, technique, and characterization. (may be repeated once) Prerequisite: THEA 3263. (F -even)

See the ASU web page (www.astate.edu) for current bulletin information.
4343. Musical Theatre  Work involves exposure to the history of and the defining and solution of acting and musical problems which occur when performing musical theatre. Prerequisite: THEA 1213. (S -even)

4353. Children’s Theatre  Presentation of plays for children’s audiences. (SU)

4363-6. Internship in Theatre  Combines relevant work experience with classroom theory. (D)

4371-2-3. Special Problem: Varying Topics  Prerequisite: permission of the instructor. (may be repeated twice with different topics) (D)

4383. Senior Project  A capstone course designed to showcase the graduating seniors achievements and accomplishments. (F, S)

4413. Sound Design and Production for the Theatre  Principles and practices of stage sound design and production. Prerequisite: THEA 1203 or consent of instructor (S -odd)
College of Humanities and Social Sciences
Professor Gloria J. Gibson, Dean
Professor Carol A. O’Connor, Associate Dean

Mission
With a faculty dedicated to innovative teaching that incorporates research, professional service, and information technology, the College of Humanities and Social Sciences seeks to:
- Provide students in general education courses with the foundational skills
  - of critical thinking and problem solving;
  - for understanding and appreciating the humanities; and
  - for understanding and analyzing social institutions
- Offer degree programs from associate through doctorate which provide graduates the knowledge and research skill necessary
  - for successful careers; and
  - for competing in professional and graduate schools; and
  - for developing a commitment to lifelong learning for success in an ever changing job market.
- Serve the public through quality research and professional service reaching from eastern Arkansas and the Mississippi River Delta region, to the nation and the world.

Programs of Study
The College of Humanities and Social Sciences offers a wide range of undergraduate degree programs including a Bachelor of Arts in Criminology, Sociology, Geography, English, Philosophy, History, Economics, French, Spanish, and Political Science and a Bachelor of Science in Education in English, Social Science, French, and Spanish. Most degree programs offer minors. Minors are also available in the following fields: African-American Studies, Family Studies, Folklore Studies, German, Medieval Studies, Modern European Studies, and Women and Gender. The College provides an Associate of Arts degree in Law Enforcement. It also provides pre-professional advisement for law school as part of its Political Science, Philosophy, and Criminology majors.

The College of Humanities and Social Sciences grants a full range of masters’ degree (M.A., M.P.A., and M.S.E.) programs, several Educational Specialist degree (Ed.S.) programs, and an interdisciplinary doctoral degree (Ph.D.) programs (Heritage Studies). For further information, see ASU’s Graduate Bulletin.

The College is comprised of the departments:
- Department of Criminology, Sociology, and Geography
- Department of English and Philosophy
- Department of History
- Department of Languages
- Department of Political Science

GRADUATION REQUIREMENT

Bachelor of Science in Education
In addition to meeting the University Requirements for all Baccalaureate Degrees as presented by the University, and the Teacher Education Program Requirements as presented by the College of Education, all candidates for a Bachelor of Science in Education degree in the College of Humanities and Social Sciences, must also have a grade point average of 2.50 on all work attempted overall, on work in the major field, and if a transfer student, on all work taken at this institution.

GRADUATION REQUIREMENT

All candidates for the Bachelor of Arts degree in the College of Humanities and Social Sciences must demonstrate proficiency in a foreign language. This may be done in either of the following ways.

1. By completing the second semester of the intermediate year of foreign language at the college level. Students with no foreign language experience must enroll in the first semester of the freshman year and complete 12 hours of a single language. Students with some experience and proficiency should consult with a member of the language faculty about their readiness for more advanced courses. (No credit will be awarded for courses waived.)

2. By passing an examination acceptable to the foreign language faculty as proof of proficiency equivalent to completion of the second semester of the intermediate year of a foreign language at the college level.

Department of Criminology, Sociology, and Geography

Associate Professor Patricia Teddile, Interim-Chair; CRIMINOLOGY: Associate Professor and Director of Criminology Program: Russell; Associate Professor Salinger; Assistant Professors Chu, Lemley; SOCIOLOGY: Associate Professor Hill; Assistant Professors Donaghy, Knight, Wienke; Instructor Monroe; ANTHROPOLOGY: Professor Clements; Associate Professors Burns; Assistant Professor Morrow; GEOGRAPHY: Professor Stroud; Assistant Professor Combs

The Department of Criminology, Sociology, and Geography offers to students courses designed to provide them with a better understanding of themselves and their environment. Within this multidisciplinary department, students have an opportunity to receive a baccalaureate degree in one of three areas: Criminology, Geography, and Sociology. Majors in the Department of Criminology, Sociology, and Geography are prepared for many professions including teaching, government service, law, business, research, cartography, and community planning; and for professional careers within the criminal justice system such as police, truancy and probation officers, parole officers, and correctional and research personnel.

Major in Criminology
Bachelor of Arts

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79

Language Requirement:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79

Major Requirements:

See the ASU web page (www.astate.edu) for current bulletin information.
CRIM 3223, Police and Society .............................................................. 3  
CRIM 3263, Criminology ................................................................. 3  
CRIM 4103, Criminal Justice Systems .............................................. 3  
SOC 3293, Social Behavior ............................................................ 3  
SOC 3383, Social Statistics/Methds ............................................... 3  
SOC 3381, Social Statistical/Methods Lab ..................................... 1  
SOC 4293, Methods of Social Research ........................................... 3  
POSC 3183, Criminal Law and the Constitution ......................... 3  
Electives (choose 21 hours from the following) .......................... 21  
CRIM 2043, Community Relations  
CRIM 2253, Criminal Investigation  
CRIM 2263, Criminal Evidence and Procedure  
CRIM 3323, Juvenile Delinquency  
CRIM 4803, Special Problems  
CRIM 4703, Internship  
HIST 3683, History of Law Enforcement  
SOC 2223, Social Problems  
SOC 3273, Social Stratification  
SOC 3353, Minority Groups  
SOC 3813, Intro to Social Sciences  
SOC 4203, Social Deviance  
SOC 4223, Urban Sociology  
SOC 4233, Social Organization  
SOC 4243, Social Theory  
SOC 4253, Rural Sociology  
SOC 4273, Population and Demography  
SOC 4323, Applied Research  
SW 3323, Substance Abuse: Intervention and Treatment  
SW 3343, Child Abuse and Neglect  
POSC 3113, American Municipal Government  
POSC 3143, American State Government  
PSY 3413, Adolescent Psychology  
PSY 4533, Psychology of the Abnormal  

Electives:  
Choose 20 hours minimum of electives, 12 of which must be taken from 3000 and/or 4000 level courses.  

Total 124

Admission and Retention

Students desiring to declare and remain a major in criminology must maintain a minimum GPA of 2.20 in the major and overall.

Major in Geography

Bachelor of Arts

General Education Requirements:  
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .................................................. 46-49

Language Requirement:  
Foreign Language (See page 332) .................................................. 0-12

Major Requirements:  
Military in Geography  

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 1003</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>CRIM 1013</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1023</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2003</td>
<td>Finite Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PHIS 1003</td>
<td>Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1002</td>
<td>Concepts of Psychology</td>
<td>2</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>POL 2104</td>
<td>American Municipal Government</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2213</td>
<td>Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2223</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2243</td>
<td>Social Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3233</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3243</td>
<td>Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3253</td>
<td>Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 4293</td>
<td>Sociology Electives</td>
<td>3</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1002</td>
<td>Concepts of Psychology</td>
<td>2</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2213</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2223</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2243</td>
<td>Social Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3233</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3243</td>
<td>Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3253</td>
<td>Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 4293</td>
<td>Sociology Electives</td>
<td>3</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1002</td>
<td>Concepts of Psychology</td>
<td>2</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2213</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2223</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2243</td>
<td>Social Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3233</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3243</td>
<td>Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3253</td>
<td>Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 4293</td>
<td>Sociology Electives</td>
<td>3</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1002</td>
<td>Concepts of Psychology</td>
<td>2</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2213</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2223</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2243</td>
<td>Social Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3233</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3243</td>
<td>Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3253</td>
<td>Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 4293</td>
<td>Sociology Electives</td>
<td>3</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1002</td>
<td>Concepts of Psychology</td>
<td>2</td>
</tr>
<tr>
<td>POL 2103</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2213</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2223</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 2243</td>
<td>Social Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3233</td>
<td>Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3243</td>
<td>Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3253</td>
<td>Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>SOC 4293</td>
<td>Sociology Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
### Minor in Geography

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives in Geography</td>
<td>3</td>
</tr>
<tr>
<td>Upper-level Electives in Geography</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### Minor in Sociology

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives in Sociology (in addition to SOC 2213, Principles of Sociology)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### Minor in Interdisciplinary Family Studies

**FAMILY CORE**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdisciplinary Course: <em>(3 hours required)</em></td>
<td>3</td>
</tr>
<tr>
<td>Sociology: <em>(3 hours required)</em></td>
<td>3</td>
</tr>
<tr>
<td>Human Development: <em>(3 hours required)</em></td>
<td>3</td>
</tr>
<tr>
<td>Families in Social Contexts: <em>(3 hours required)</em></td>
<td>3</td>
</tr>
<tr>
<td>Family and Health: <em>(3 hours required)</em></td>
<td>3</td>
</tr>
<tr>
<td>Special Interest Option: <em>(3 hours required)</em></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### Department of English and Philosophy

Professor Charles Carr, Chair; ENGLISH: Professors Ball, Calloway, Clements, Lott, Malpezzi, McGhee, Spikes, Schichler, Stafford; Associate Professors Burns, Chappell, Collins, Harris, Hendershot, Lamm, Moore, Narey; Assistant Professors Gennuso, Hansen, Horner, Hunter, Spaniol, Williams; Instructor Young; PHILOSOPHY: Associate Professors Cave, Sartorelli; Assistant Professor Schroer

Courses offered in English are designed to promote the effective use of oral and written English; to encourage selective and interpretive reading; to increase the capacity to understand and appreciate the classics, the humanities, and the fine arts; to foster the development of personal philosophies based upon time-tested truths.

It is assumed that any student enrolling in any literature class will be able to demonstrate competent writing ability.

The program for students majoring in English is designed to afford a liberal education to meet the needs of teacher certification; to create a humane basis for careers in business, in the learned professions, or in government; and to prepare for graduate study.

Courses offered in philosophy are designed to provide students with the knowledge and logical skills to understand and critically evaluate the intellectual, moral, and religious choices they encounter.

The program for students majoring in philosophy seeks to provide the background necessary for those preparing for law school, seminary, and graduate school as well as for those who simply seek a liberal education as the foundation of a career in business or industry.

### Writing Clinic

The department offers a special free service to students at all levels: a writing laboratory designed to help students with individual problems. Contact the department office for details.

### Major in English

**Bachelor of Arts**

### General Education Requirements:

<table>
<thead>
<tr>
<th>General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

### Language Requirement:

<table>
<thead>
<tr>
<th>Foreign Language <em>(See page 332)</em></th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-12</td>
</tr>
</tbody>
</table>

### Major Requirements:

<table>
<thead>
<tr>
<th>Major Requirements:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2103, Introduction to Poetry and Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2113, Introduction to Fiction</td>
<td>3</td>
</tr>
<tr>
<td>British Literature <em>(Three courses from the following with at least one course from British literature before 1850 and at least one course from British literature since 1850)</em></td>
<td>9</td>
</tr>
<tr>
<td>ENG 3223, British Literature to 1800</td>
<td></td>
</tr>
<tr>
<td>ENG 3233, Shakespeare</td>
<td></td>
</tr>
<tr>
<td>ENG 3243, British Drama to 1800</td>
<td></td>
</tr>
<tr>
<td>ENG 4183, Renaissance Drama Excluding Shakespeare</td>
<td></td>
</tr>
<tr>
<td>ENG 4213, Medieval Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 4223, Milton</td>
<td></td>
</tr>
<tr>
<td>ENG 4233, Seventeenth-Century Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 4243, Eighteenth-Century Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 4253, Restoration and Neoclassical Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 3263, British Literature Since 1850</td>
<td></td>
</tr>
<tr>
<td>ENG 3293, British Novel</td>
<td></td>
</tr>
<tr>
<td>ENG 4263, Romantic Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 4273, Victorian Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 4283, Modern British Literature</td>
<td></td>
</tr>
<tr>
<td>American Literature <em>(Two courses from the following)</em></td>
<td>6</td>
</tr>
<tr>
<td>ENG 3323, American Literature to 1865</td>
<td></td>
</tr>
<tr>
<td>ENG 3363, American Literature Since 1865</td>
<td></td>
</tr>
<tr>
<td>ENG 3373, Regional American Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 3393, American Novel</td>
<td></td>
</tr>
<tr>
<td>ENG 4333, American Romanticism</td>
<td></td>
</tr>
<tr>
<td>ENG 4353, American Realism and Naturalism</td>
<td></td>
</tr>
<tr>
<td>ENG 4373, Modern American Literature</td>
<td></td>
</tr>
<tr>
<td>Multicultural Literature <em>(One course from the following)</em></td>
<td>3</td>
</tr>
<tr>
<td>ENG 3633, Native American Literary Art</td>
<td></td>
</tr>
<tr>
<td>ENG 3643, African-American Folklore</td>
<td></td>
</tr>
<tr>
<td>ENG 4383, Minority Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 4363, African-American Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 4473, Women Writers</td>
<td></td>
</tr>
<tr>
<td>Global Literature <em>(One course from the following)</em></td>
<td>3</td>
</tr>
<tr>
<td>ENG 3423, Contemporary Prose</td>
<td></td>
</tr>
<tr>
<td>ENG 3433, Modern and Contemporary Drama</td>
<td></td>
</tr>
<tr>
<td>ENG 3443, Contemporary Poetry</td>
<td></td>
</tr>
<tr>
<td>ENG 3453, World Literature</td>
<td></td>
</tr>
<tr>
<td>Theory, Writing, and Language</td>
<td>6</td>
</tr>
<tr>
<td>ENG 4103, Introduction to Contemporary Literary Theory</td>
<td></td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
And one course from the following:
ENG 3003, Advanced Composition
ENG 3023, Creative Writing
ENG 3043, Technical Writing
ENG 3613, Introduction to Folklore
ENG 4023, Advanced Creative Writing
ENG 4053, The English Language
ENG 4063, Comparative Modern Grammars
ENG 4083, Introduction to Linguistics
ENG 4113, Genre Studies
ENG 4623, Mythology

Optional Concentration in Writing

Students electing to complete the B.A. in English with the Optional Concentration in Writing must take one writing course as part of the "Theory, Writing, and Language" requirement for all majors. They must also complete three other upper-level writing courses chosen from the following:
ENG 3003, Advanced Composition
ENG 3023, Creative Writing
ENG 3043, Technical Writing
ENG 4023, Advanced Creative Writing

Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English B.A. majors are encouraged to develop a strong outside area of concentration.</td>
<td>27-42</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
</tr>
</tbody>
</table>

Minor in Philosophy
Bachelor of Arts

General Education Requirements:  
Sem. Hrs. 46-49

Language Requirement:
Sem. Hrs. 0-12

Major Requirements:  
Sem. Hrs. 39

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science in Education</td>
<td>3</td>
</tr>
<tr>
<td>English elective in British Literature</td>
<td>3</td>
</tr>
<tr>
<td>Upper-level English Electives</td>
<td>6</td>
</tr>
<tr>
<td>** TIEN 4826, Teaching Internship in the Secondary School</td>
<td>12</td>
</tr>
<tr>
<td>** SCED 4713, Educational Measurement with Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>** SE 3643, The Exceptional Student in the Regular Classroom</td>
<td>3</td>
</tr>
<tr>
<td>* See Bachelor of Science in Education degree—College of Education</td>
<td>33</td>
</tr>
<tr>
<td>* Prerequisite: Admission into the Teacher Education Program</td>
<td></td>
</tr>
<tr>
<td>NOTE 1: B.S.E. English majors seeking admission to the Teacher Education Program will be required to demonstrate writing competency at the time of their screening.</td>
<td></td>
</tr>
<tr>
<td>NOTE 2: One of the literature courses should be either multicultural in nature or have strong multicultural component.</td>
<td></td>
</tr>
</tbody>
</table>

Additional General Requirements for Teacher Education:
Sem. Hrs. 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 2513, Principles of Personal Health</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>0-3</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
</tr>
</tbody>
</table>

Minor in English
Sem. Hrs. 18

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 2103, Introduction to Poetry and Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2113, Introduction to Fiction</td>
<td>3</td>
</tr>
<tr>
<td>English elective in British Literature</td>
<td>3</td>
</tr>
<tr>
<td>English elective in American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Upper-level Electives in English</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

Minor in Folklore Studies
Sem. Hrs. 18

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 3613, Introduction to Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENG 4643, Independent Fieldwork in Folklore</td>
<td>3</td>
</tr>
<tr>
<td>Folklore Studies electives</td>
<td>12</td>
</tr>
<tr>
<td>ENG 3523, American Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3603, Native American Verbal Art</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3643, African-American Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENG 4613, Ballad and Folksong</td>
<td>3</td>
</tr>
<tr>
<td>ENG 4623, Mythology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 4633, Material Folk Culture</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
Minor in Philosophy

PHIL 1103, Introduction to Philosophy .................................................. 3
PHIL 1903, Logic .................................................................................. 3
Upper-level Elective in History of Philosophy ........................................... 3
Upper-level Electives in Philosophy ......................................................... 3

Total 18

Minor in Studies in Women and Gender

Completion of the minor will require eighteen (18) upper-level hours in women and gender. For the core curriculum of the minor, students must choose at least four three-hour courses from the six courses listed below, all of which are taught at least once every two years.

Sem. Hrs.
SOC 3303, Sociology of Gender ......................................................... 3
NRS 3333, Women's Health: Past, Present, Future ................................. 3
ENG 4473, Women Writers ................................................................... 3
HIST 4473, U.S. Southern Women's History ....................................... 3
JOUR 4323, Race, Gender and Media .................................................. 3

Total 18

Department of History

Professor Alexander Sydorenko, Chair; Professors Anderson, Dougan, Milner, O'Connor, Rousey; Associate Professors Gilbert, Greenwald, Hogue, Hronek, Maynard, Pobst, Wilkerson-Freeman; Assistant Professors Banta, Jones, Key

The Department of History offers to all students of the university courses of general cultural and educational value. It seeks not only to acquaint students with the development of human civilization and with their duties as citizens, but to advance them toward their vocational and professional objectives.

The major in history with the Bachelor of Arts degree is recommended for those seeking a liberal education and aspiring to careers in history, law, theology, journalism, and library work; in local, state, and national public service; in business where a knowledge of domestic and foreign affairs is desirable; and in every area which requires an understanding of human activity.

The major in social science with the Bachelor of Science in Education degree is offered specifically to prepare teachers of social science in institutions of secondary education.

Major in History

Bachelor of Arts

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .............................................. 46-49

Language Requirement:

Sem. Hrs.
Foreign Language (See page 332) ....................................................... 0-12

Major Requirements: ........................................................................... Sem. Hrs.
HIST 1013 OR HIST 1023 ................................................................. 3-6
(one course required in General Education)
HIST 2763 AND/OR HIST 2773 ......................................................... 3
(one course may be taken in General Education)
HIST 3333, The Practice of History .................................................... 3
United States History electives (Junior or Senior level) ....................... 9
European History electives (Junior or Senior level) .............................. 6
World History electives (Junior or Senior level) ................................... 6
History electives (Junior or Senior level) .............................................. 9

42-39

Electives:

Sem. Hrs.
Must include 12 hours at Junior/Senior level ........................................ 24-39

NOTE: The Department of History recommends that its majors select a minor in a specific field approved by the department.

Major in Social Science

Bachelor of Science in Education

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .............................................. 46-49

Specific General Education Requirements:

Students with this major must take the following:
POSC 2103, Introduction to United States Government ......................... 3
PSY 2013, Introduction to Psychology .................................................. 3

Major Requirements:

United States History (includes HIST 2763 and 2773 and 9 hours of Junior/Senior level courses) ...................... 15
World History (Junior/Senior level) ...................................................... 6
Political Science (Junior/Senior Level) .................................................... 3
POSC 3193, Arkansas Government and Politics ..................................... 3
Geography ......................................................................................... 3
Economics ......................................................................................... 3
Sociology ......................................................................................... 3
HIST 3083, Arkansas History .............................................................. 3
HIST 3333, The Practice of History ..................................................... 3
HIST 4312, Computer Technologies for the History/Social Sciences Educator ...................................................... 2

At least 29 of the 47 hours required for the major must be upper-level courses ......................................................... 47

Professional Education Requirements:* .............................................. Sem. Hrs.
** SCED 2514, Introduction to Secondary Teaching ................................ 4
PSY 3703, Educational Psychology ..................................................... 3
SE 3643, The Exceptional Student in the Regular Classroom ................ 3
*** SCED 4515, Performance Based Instructional Design .................... 5
SCED 4713, Educational Measurement with Computer Applications .... 3
EDSS 4603, Methods and Materials for Teaching Social Studies ........ 3
in the Secondary School ................................................................. 12
TIHL 4625, Teaching Internship in the Secondary School ...................... 3

HLTH 2513, Principles of Personal Health ........................................... 3
* See Bachelor of Science in Education Requirements—College of Education
** Prerequisite to all other professional education course work
*** Prerequisite to EDSS 4603; see adviser

Total 127

At BSE Social Science candidates must take the appropriate Praxis Series Exams required for licensure in Arkansas and report their test results to the Department of History before graduation.

Major in Economics

Bachelor of Arts

General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .............................................. 46-49

256

See the ASU web page (www.astate.edu) for current bulletin information.
### Language Requirement:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Language (See page 332)</td>
<td>0-12</td>
</tr>
</tbody>
</table>

### Major Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIS 3023, Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2313, Principles of Macroeconomics*</td>
<td>0-3</td>
</tr>
<tr>
<td>ECON 2322, Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3313, Microeconomics Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3323, Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3353, Income and Employment Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4313, Development of Economic Thought</td>
<td>3</td>
</tr>
<tr>
<td>Political Science Electives</td>
<td>3</td>
</tr>
<tr>
<td>Economics Electives</td>
<td>3</td>
</tr>
<tr>
<td>Sociology Elective</td>
<td>6</td>
</tr>
</tbody>
</table>

* Required ONLY if not taken to satisfy a part of the General Education Requirements

### Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 124</td>
<td></td>
</tr>
</tbody>
</table>

### Minor in History

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Electives</td>
<td>6</td>
</tr>
<tr>
<td>Upper-level United States History Electives</td>
<td>6</td>
</tr>
<tr>
<td>Upper-level European or World History Electives</td>
<td>6</td>
</tr>
<tr>
<td>Total 18</td>
<td></td>
</tr>
</tbody>
</table>

### Minor in African-American Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3103, Civilizations of Africa</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3673, African-American History to 1900, OR</td>
<td>3</td>
</tr>
<tr>
<td>POSC 3163, Black Politics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3634, African-American Folklore</td>
<td>3</td>
</tr>
<tr>
<td>African-American Studies electives</td>
<td>9</td>
</tr>
<tr>
<td>ART 4563, History of Non-Western Art</td>
<td>3</td>
</tr>
<tr>
<td>ENG 4383, Minority Literature</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3663, Geography of Africa</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3673, African-American History to 1900, OR</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4613, African American History since 1900</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 4323, Race, Gender and Media</td>
<td>3</td>
</tr>
<tr>
<td>POSC 3213, African Political Systems</td>
<td>3</td>
</tr>
<tr>
<td>SCOM 4253, Intercultural Communications</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3353, Minority Groups</td>
<td>3</td>
</tr>
<tr>
<td>Total 21</td>
<td></td>
</tr>
</tbody>
</table>

### Minor in Medieval Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3183, Medieval Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3193, The Crusades</td>
<td>3</td>
</tr>
<tr>
<td>ENG 4213, Medieval Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3213, History of Ancient and Medieval Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>ART 4533, Renaissance Art History</td>
<td>3</td>
</tr>
<tr>
<td>ART 4553, Early Christian through Gothic Art History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4213, History of England, 55 B.C. to A.D. 1689</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3223, Renaissance and Reformation Europe</td>
<td>3</td>
</tr>
<tr>
<td>POSC 3413, Classical and Medieval Political Theory</td>
<td>3</td>
</tr>
<tr>
<td>Total 18</td>
<td></td>
</tr>
</tbody>
</table>

Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 124</td>
<td></td>
</tr>
</tbody>
</table>

### Minor in Modern European Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>European History electives</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3253, Modern Europe, 1750-1870</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3273, Age of Crisis, Europe, 1870 to Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 3283, Society and Thought in Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4123, Soviet Russia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4223, History of Great Britain 1688-1982</td>
<td>3</td>
</tr>
<tr>
<td>HIST 4253, Rise of Modern Germany</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 3713, Geography of Europe and the Former USSR Lands</td>
<td>3</td>
</tr>
<tr>
<td>POSC 3223, European Political Systems</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>One of these courses:</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 3232, History of Modern Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>ENG 3263, British Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 4283, Modern British Literature</td>
<td>3</td>
</tr>
<tr>
<td>FR 3613, French Civilization</td>
<td>3</td>
</tr>
<tr>
<td>GER 3173, German Civilization</td>
<td>3</td>
</tr>
<tr>
<td>POSC 4213, Politics of the Former Soviet Lands</td>
<td>3</td>
</tr>
<tr>
<td>OR History course from the list above</td>
<td>3</td>
</tr>
<tr>
<td>Total 18</td>
<td></td>
</tr>
</tbody>
</table>

### Department of Languages

Courses offered in foreign languages are designed to train students to read, write, speak, and understand the target language; to acquaint them with the literature and culture of the countries where the target language is spoken; to provide a lingual tool necessary in many professions; and to afford a source of literary and aesthetic pleasure. The department has a multimedia language laboratory where students may practice oral, aural, and writing skills.

### Major in Modern European Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>European History electives</td>
<td>3</td>
</tr>
<tr>
<td>Total 18</td>
<td></td>
</tr>
</tbody>
</table>

### General Education Requirements:

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 46-49</td>
<td></td>
</tr>
</tbody>
</table>

### Major Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 3013, French Phonetics OR FR 4503, Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>FR 3183, French Conversation</td>
<td>3</td>
</tr>
<tr>
<td>FR 3223, Advanced French Conversation OR FR 3703, French for International Business</td>
<td>3</td>
</tr>
<tr>
<td>FR 3463, Advanced French Grammar</td>
<td>3</td>
</tr>
<tr>
<td>FR 3473, French Composition</td>
<td>3</td>
</tr>
<tr>
<td>FR 3613, French Civilization OR FR 3623, Contemporary France</td>
<td>3</td>
</tr>
<tr>
<td>FR 4413, Survey of French Literature I</td>
<td>3</td>
</tr>
<tr>
<td>FR 4423, Survey of French Literature II</td>
<td>3</td>
</tr>
<tr>
<td>FR 4503, Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>Other upper-level class not taken (except FR 3023), or repeated FR 4503, Special Topics (when topic varies)</td>
<td>3</td>
</tr>
<tr>
<td>Total 30</td>
<td></td>
</tr>
</tbody>
</table>

### Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 124</td>
<td></td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
### Major in Spanish

**Bachelor of Arts**

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3013, Spanish Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3183, Spanish Conversation</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3303, Grammar and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3303, Spanish Conversation II</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3403, Grammar and Composition II</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3413, Introduction to Hispanic Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 4443, Survey of Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one of the following:</strong></td>
<td></td>
</tr>
<tr>
<td>SPAN 3623, Culture and Civilization: The Americas</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3633, Culture and Civilization: Spain</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Electives:**

- Select two (2) from the following:
  - SPAN 3703, Spanish for International Business
  - SPAN 4503 Special Topics (may be repeated for credit if offered)
  - SPAN classes from either of the two "Select one" categories not already taken for degree credit

**Electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>42-45</td>
</tr>
</tbody>
</table>

Total 124

### Major in French

**Bachelor of Science in Education**

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

**Specific General Education Requirements:**

- Students with this major must take the following:
  - HIST 2763, The U.S. To 1876
  - OR HIST 2773, The U.S. Since 1876
  - POSC 2103, Introduction to United States Government
  - PSY 2013, Introduction to Psychology

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 3013, French Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>FR 3183, French Conversation</td>
<td>3</td>
</tr>
<tr>
<td>FR 3203, Advanced French Conversation</td>
<td>3</td>
</tr>
<tr>
<td>FR 3463, Advanced French Grammar</td>
<td>3</td>
</tr>
<tr>
<td>FR 3473, French Composition</td>
<td>3</td>
</tr>
<tr>
<td>FR 3613, French Civilization OR FR 3623, Contemporary France</td>
<td>3</td>
</tr>
<tr>
<td>FR 4413, Survey of French Literature I</td>
<td>3</td>
</tr>
<tr>
<td>FR 4423, Survey of French Literature II</td>
<td>3</td>
</tr>
<tr>
<td>FR 4503, Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>Other upper-level class not taken (except FR 3023 or 3703), or repeated FR 4503, Special Topics (when topic varies)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 30

**Professional Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCED 2514, Introduction to Secondary Teaching (with lab)</strong></td>
<td>4</td>
</tr>
<tr>
<td>PSY 3703, Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ELSE 3463, Exceptional Student in the Regular Classroom</td>
<td>3</td>
</tr>
<tr>
<td><strong>SCED 3515, Performance Based Instructional Design (with lab)</strong></td>
<td>5</td>
</tr>
<tr>
<td>SCED 4713, Educational Measurement with Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

### Major in Spanish

**Bachelor of Science in Education**

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

**Specific General Education Requirements:**

- Students with this major must take the following:
  - HIST 2763, The U.S. To 1876
  - OR HIST 2773, The U.S. Since 1876
  - POSC 2103, Introduction to United States Government
  - PSY 2013, Introduction to Psychology

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 3013, Spanish Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3183, Spanish Conversation</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3303, Grammar and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3303, Spanish Conversation II</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3403, Grammar and Composition II</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3413, Introduction to Hispanic Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 4443, Survey of Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td><strong>Select one of the following:</strong></td>
<td></td>
</tr>
<tr>
<td>SPAN 3623, Culture and Civilization: The Americas</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 3633, Culture and Civilization: Spain</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Electives:**

- Select two (2) from the following:
  - SPAN 3703, Spanish for International Business
  - SPAN 4503 Special Topics (may be repeated for credit if offered)
  - SPAN classes from either of the two "Select one" categories not already taken for degree credit

**Electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>42-45</td>
</tr>
</tbody>
</table>

Total 124

See the ASU web page (www.astate.edu) for current bulletin information.
Education Requirements in this major.

Minor in French
Sem. Hrs.
FR 2023, Intermediate French II ................................................................. 3
FR 3183, French Conversation .................................................................. 3
FR 3463, Advanced French Grammar ....................................................... 3
FR 3613, French Civilization OR FR 3623, Contemporary France .............. 3
FR 4413, Survey of French Literature I OR FR 4423, Survey of French Literature II ................................................................. 3
Upper-level Elective (excluding FR 3023, FR 4601-2-3) .................................. 3
Total 18

Minor in German
Sem. Hrs.
GER 2013, Intermediate German I ............................................................... 3
GER 2023, Intermediate German II .............................................................. 3
GER 3173, German Civilization ................................................................ 3
GER 3183, German Conversation .............................................................. 3
GER 3413, Introduction to German Literature ............................................. 3
Total 18

Minor in Spanish
Sem. Hrs.
SPAN 2023, Intermediate Spanish II .......................................................... 3
SPAN 3183, Spanish Conversation ............................................................. 3
SPAN 3303, Grammar and Composition .................................................. 3
SPAN 3413, Introduction to Hispanic Literature ....................................... 3
SPAN 3623, Culture and Civilization: The América .................................. 3
Spanish Elective ...................................................................................... 3
Total 18

Department of Political Science
Associate Professor Richard Wang, Interim-Chair; Professors Hartwig, Marlay; Associate Professors England, Harding, Reese, Student; Assistant Professors Levenbach, McLean

The Department of Political Science provides students with the information and the intellectual stimulus needed to cope with the problems of modern politics.

A concrete orientation toward specific careers is provided by a program of coursework that prepares students for law school as well as careers in politics, public and foreign service, teaching, journalism, and business. Individual courses focus on urban, state, national, and international government—the executive, judicial, and legislative branches; the politics of Europe, Africa, Mideast, and East Asia; and the theoretical presuppositions underlying political differences within and between nations.

Major in Political Science
Bachelor of Arts

General Education Requirements:
Sem. Hrs.
See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .................................................. 46-49
NOTE: POSC 2103 will not be accepted to fulfill General Education Requirements in this major.

Language Requirement:
Sem. Hrs.
Foreign Language (See page 332) .............................................................. 0-12

Major Requirements:
Sem. Hrs.
POSC 2103, Introduction to United States Government ................................ 3
POSC 3003, Introduction to Political Analysis ............................................ 3
Political Science Electives (3000-4000) ....................................................... 36
(At least three semester hours in each of the following areas:
American Politics, Comparative Politics, International Relations, Political Theory, and Public Administration. Concentration in one of these areas is expected.)

Electives:
Sem. Hrs.
21-36

Minor in Political Science
Sem. Hrs.
Electives in Political Science ..................................................................... 6
Upper-level Electives in Political Science ................................................... 12
Minors in sub-fields (American Politics, Comparative Politics, International Relations, Political Theory, and Public Administration) may be granted if at least 12 hours of upper-level courses are completed in the appropriate sub-field.

Total 18

DEPARTMENT OF CRIMINOLOGY, SOCIOLOGY, AND GEOGRAPHY

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Anthropology (ANTH)
2233. Introduction to Cultural Anthropology ........................................... Introduction to the concept of culture.
(F, S, SU)

2243. Introduction of Physical Anthropology ............................................. Introduces primatology, human population genetics and micro-evolution. (F)

3203. Introduction to Archaeology ............................................................. Methods, theory, history, and techniques of archaeology as a branch of anthropology and a world survey of the prehistoric development of culture. (S -odd)

3233. Native American Culture in the Mid-South ..................................... Study of the region’s early inhabitants, with field work opportunities. Offered in alternative years. Prerequisites: ANTH 2233 or permission of the instructor. (S -even)

4601-2-3. Special Problems ................................................................. Individually directed problems in Anthropology. Must be arranged with the professor and approved by department chair. (TBA)

Criminology (CRIM)

1023. Introduction to Criminal Justice ...................................................... The introductory survey course in criminology, dealing with the main components of the criminal justice system including the police, courts, and corrections, as well as issues and procedures pertinent to the operation of these components. Prerequisite for CRIM 4103. (F, S, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
2043. **Community Relations in the Administration of Justice**
Provides an understanding of the complex factors in human relations. The philosophy of law enforcement is examined with the emphasis on the social forces which create social change and disturbance. (S)

2253. **Criminal Investigation**
Includes fundamentals and theory of an investigation, conduct at crime scenes, collection and presentation of physical evidence, and methods used in the police service laboratory. (F)

2263. **Criminal Evidence and Procedure**
Rules of Evidence of import at the operational level in law enforcement and criminal procedures, personal conduct of the officer as a witness, examination of safeguarding personal constitutional liberties. (F)

3183. **Institutional Corrections**
An examination of the context, structure, and dynamics of local, state, and federal criminal confinement facilities. (F)

3193. **Community Corrections**
An examination of noninstitutional correctional agencies and techniques including probation, parole, diversion, pre-trial release, community service, restitution, halfway house, and similar programs. (S)

3223. **Police and Society**
Explores the relationship of the police to courts, probation, community corrections, institutional corrections, and parole. Also explores the relationship between police and other social institutions and the philosophy of police as an agent of social control. (S)

3263. **Criminology**
Sociological patterns of crime and criminals, with emphasis on causes, effects, and prevention. (F, S)

3221. **Juvenile Delinquency**
Causative factors in home, school, and community; extent of the problem; and methods of prevention and treatment. (F)

4103. **Criminal Justice Systems**
General functions of the individual agencies and the duties and responsibilities of the individuals who perform these functions. (F)

4601-2-3. **Special Problems**
Individually directed problems in Criminology. Must be arranged with the professor and approved by department chair. (TBA)

4701-2-3. **Internship**
Combines supervised work experience with study of selected agencies and organizations. Must be arranged with the professor and approved by the department chair. (F, S, SU)

**Geography (GEOG)**

2613. **Introduction to Geography**
Emphasizes the physical and cultural patterns in the world. (F, S, SU)

3603. **World Regional Geography**
Surveys geographic regions of the world, emphasizing the different ways of living and thinking by man in these different regions. (F -even)

3613. **Geography of the United States and Canada**
Emphasizes the physical and cultural backgrounds of the United States and Canada. (S -even)

3643. **Introduction to Cultural Geography**
Systematic examination of various cultures, especially their philosophies and dynamics of resource utilization and economic development. (S -even)

3683. **Economic Geography**
Spatial distribution and inter-relations of economic factors and forces and how they are affected by geographic factors. (S -even)

3703. **Political Geography**
Content and philosophy of political geography and a geographic approach to the patterns of power and conflict among nation-states. Consideration of regional blocs, strategic areas, disputed zones, and the dynamic impact of technology. (D)

3723. **Introduction to Physical Geography: Weather and Climate**
Examines the nature and character of various components of the physical environment including basic weather elements, climate, landforms, soil and natural vegetation. (D)

3743. **Introduction to Land Use Planning**
Introduces the student to theoretical as well as practical aspects of land use planning, focusing on the spatial, economic, and political aspects of land use in both rural and urban settings. (D)

3813. **Introduction to Geographic Information Systems**
Introduces students to Geographic Information systems concepts and techniques. (D)

4113. **Water Resources Planning**
A study of the basic concepts of hydrology and the major issues associated with water resources planning and management. (D)

4223. **Urban Geography**
History, structure, function, growth, location, land use, and problems of movement, and city-region relationships. (NOTE: GEOG 4223 and SOC 4223 are equivalent courses—credit may be received for only one of the courses.) (F, SU -even)

4313. **Advanced Perspective in Historical Geography**
Examines issues that are both chronological and spatial in nature including settlement patterns, migration, and population trends. (D)

4601-2-3. **Special Problems**
Individually directed problems in Geography. Must be arranged with the professor and approved by department chair. (TBA)

4613. **Conservation of Natural Resources**
Current problems associated with the conservation of natural resources. (D)

4623. **Environmental Management**
The dynamic nature of the earth’s surface, using the hydrologic cycle as a broad framework for analyzing the physical environment and for assessing sound environmental management practices. (S -even)

4633. **Climatology**
Climatic regions of the world; controlling factors of weather. (D)

4643. **Geography of Arkansas**
Arkansas’ physical, cultural, and historical landscapes. (SU)

4683. **Senior Seminar**
The more important research methods in obtaining geographical information. (D)

4703-6. **Internship in Geography**
Combines relevant work experience with classroom theory in public and private planning agencies. Must be arranged with professor and approved by the department chair. (D)

4813. **Special Topics in Geography**
An intensive study of a region or pertinent topic in geography. May be repeated once when topic changes. (D)

**Sociology (SOC)**

2213. **Principles of Sociology**
Human society and social behavior. (F, S, SU)

2223. **Social Problems**
Application of sociological concepts and methods in the analysis of current social problems in the United States, including family and community disorganization, delinquency and crime, mental illness, and intergroup relations. (Cross listed as SW 2223) (F, S, SU)
See the ASU web page (www.astate.edu) for current bulletin information.

2233. Technology and Society  This course will critically examine how technology has changed the society in which we live. In doing so, we will explore how technologies are introduced, who benefits from their implementation, the risks involved with technologies, and how technology can be controlled. (S)

3003. Sociology of Gender  Origins, acquisition, structure, and change of gender roles in contemporary society, examined in terms of impact upon both the individual and society. (F)

3213. Sociology of Intimate Relationships  Aspects of close social relationships; roles, power, love, conflict, and change. (F -even)

3223. Sociology of Marriage and the Family  Emphasizes the sociocultural factors influencing the structure and development of marriage and the family. (F, S, SU)

3273. Social Stratification  Status and social stratification; power, prestige, and social opportunities of the upper, middle, and lower classes; and class differences in behavior, with definite emphasis on social class in America. (S)

3293. Social Behavior  Factors influencing behavior in social situations. (S)

3333. Sociology of Health and Illness  Social causation of diseases, social definition of health and illness, social aspects of healing and rehabilitation, the nature of health professions, and the delivery of health-care services. (D)

3353 Minor Groups  Cultural approach to racial and nationality groups in American society. Competition, conflict, accommodation, and assimilation are studied as processes. (F, S, SU)

3363. Sociology of Religion  Examines the relationship of religion to society, focusing on the functions and dysfunctions of religious systems on other social institutions. (D)

3381. Laboratory for Social Statistics  Laboratory associated with SOC 3383. Two hours per week. Corequisite: SOC 3383 (F, S)

3383. Social Statistics  Pertinent concepts, techniques, methods, and approaches used in sociological investigation. (F, S)

4053. Today’s Families: Interdisciplinary Approaches  An interdisciplinary course designed to promote a critical approach to examining the family and its role in society. Prerequisite: 12 hours of coursework in Interdisciplinary Family Minor or instructor’s permission. Cross-listed as ECH 4053, NRS 4053, PSY 4053.

4203 Social Deviance  Describes and explains the violation of social norms. (S)

4213. The Sociology of Childhood and Adolescence  Focuses upon how the family life cycle influences the sociocultural experiences of children and adolescents. (SU)

4223. Urban Sociology  History, structure, function, growth, location, land use, and problems of movement, and city-region relationships. (NOTE: SOC 4223 and GEOG 4223 are equivalent courses—credit may be received for only one of the courses.) (F, SU -even)

4233. Social Organization  Concepts and principles of social organization and disorganization and the disruptive effects of social and cultural dynamics upon the individual, family, community, nations, and world. (SU)

4243. Social Theory  Social thinking through the ages. (F)

4253. Rural Sociology  Controlled discussion of rural sociological issues, including: historical development of rural sociology; overview of substantive areas, with emphasis on current research and theoretical issues; future of the discipline of rural sociology. (S -odd)

4273. Population and Demography  Population patterns of the world and the United States with emphasis on the various causes of migration. (NOTE: SOC 4273 and GEOG 4273 are equivalent courses—credit may be received for only one of the courses.) (S, SU -odd)

4293. Methods of Social Research  Practical applications of sociological research techniques. (F, S)

4323. Applied Research  Techniques for analyzing social science data using the Statistical Package for the Social Sciences and other data analysis systems. Prerequisites: SOC 3383 and 4293, or equivalents. (F, S)

4343. Geographic Information Systems for the Social Sciences  An introduction to the applied analysis of social and environmental geographic data. Includes a discussion of geographic data, maps, and conducting applied geographic analysis. Prerequisites: SOC 3383, SOC 4293 or POSC 3003 or PSY 3103 and PSY 3123 or QM 2113 and QM 3113 or AGRI 3233 and AGRI 4233 or TECH 3773 and TECH 4813. (F)

4353. Sociology of Aging  Survey of theories, methodologies, concepts, and major research findings regarding the aging of individuals and societies, using the U.S. as a central example. (F)

4363. Environmental Sociology  This course explores how our views of nature and the environment are socially constructed. In this context, we will examine how numerous environmental issues are created and exacerbated by social issues. We will also investigate actions that will reduce our ecological footprint. Permission of instructor required. (D)

4373. Sustainable Development in Modern Society  This course will introduce students to the concept of sustainable development. In our investigation of what a sustainable community would look like, issues such as development paradigms, human-environment interactions, and politics will be discussed on local, national, and international scales. Permission of instructor required. (D)

4601-2-3. Special Problems  Individually directed problems in sociology and criminology for juniors and seniors. Must be arranged in consultation with a professor, and approved by the department chair. (F, S, SU)

4703. Internship  Combines supervised work experience with study of selected agencies and organizations. Must be arranged with the professor and approved by the department chair. (F, S, SU)

DEPARTMENT OF ENGLISH AND PHILOSOPHY  The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

English (ENG)

0002. Writing Tutorial  Intensive, individualized work on the basic strategy, organization, diction, and grammar of the collegiate essay. To be taken in conjunction with Freshman English I. (F, S)

1003. Composition I  Study and practice of fundamentals of written communication including principles of grammar, punctuation, spelling, organization, and careful analytical reading. Prerequisite, with grade of C or better, for ENG 1013. (F, S)

See the ASU web page (www.astate.edu) for current bulletin information.
Composition II  Continues the practice of ENG 1003, to develop further the skills learned in that course. Based on reading and discussion of various kinds of writing, the students' essays will provide practice in different kinds of rhetorical development including research and documentation. Prerequisite: must complete ENG 1003 with grade of C or better for degree. (F, S)

Composition for Non-Native Speakers I  Comprehensive advanced grammar, sentence structure, and vocabulary for students scoring under 500 on the TOEFL. (F, S)

Composition for Non-Native Speakers II  Designed to help non-native students develop their ideas into well organized, well developed and effective paragraphs and essays based on major rhetorical patterns. Grammar, sentence structure, and the complete writing process are emphasized. (F, S)

Introduction to Literature of the Western World I  Introduction to the analysis and interpretation of literary works from several historical periods ranging from early civilizations through the Renaissance. (F, S)

Introduction to Literature of the Western World II  Introduction to the analysis and interpretation of literary works from several historical periods ranging from the Renaissance to the present. (F, S)

Introduction to Poetry and Drama  Poetry and drama with emphasis on analytic reading and writing skills. (F, S)

Introduction to Fiction  Short fiction and the novel with emphasis on analytic reading and writing skills. (F, S)

Advanced Composition  Emphasis on the development of structure and style in the literary essay and on research skills. (S)

Practical Writing  Emphasis on practical writing skills applicable to students in all disciplines. Will not apply to English degree requirements. (F, S)

Creative Writing  Instruction and practice in the writing of poetry, fiction, and drama. (F)

Technical Writing  Forms and techniques of technical writing. (S -odd)

British Literature to 1800  Major British authors, genres, and movements from the beginning to the end of the Neoclassical period. (F -even)

Shakespeare  Introduction to the works of Shakespeare. (F)

British Drama to 1800  Drama in the Middle Ages, Renaissance, Restoration, and Neoclassical periods, including at least three Shakespeare plays. (S -odd)

British Literature Since 1800  Major British authors, genres, and movements from the Romantic period to the present. (F -odd)

British Novel  Representative British novels. (S -even)

American Literature to 1865  Major American authors, genres, and movements from the beginning through the Civil War. (F -even)

American Literature Since 1865  Major American authors, genres, and movements from the Civil War to the present. (F -odd)

Regional American Literature  Writings from a selected region of the United States. (F -odd)

American Novel  Representative American novels. (S -odd)

Contemporary Prose  Global fiction and/or non-fiction from 1945 to the present, including British or American and world authors. (F -even)

Modern and Contemporary Drama  Global drama from Ibsen to the present, including British or American and world authors. (S -even)

Contemporary Poetry  Global poetry from 1945 to the present, including British and/or American and world authors. (F -odd)

World Literature  Selected authors, genres, movements, or themes in world literature. (F -even)

Literature and Film  A study of how literature and literary tradition translate into cinema. Prerequisites: ENG 2003, 2103, 2113 or equivalent. (F -even)

Special Projects  Practicum in the teaching of composition for the pre-professional. Prerequisite: consent of instructor. (F)

The Bible as Literature  Analytical/critical study of selected books of the Bible with emphasis on its component genres, literary qualities, and influence. May not be repeated for credit. (S -odd)

Popular Literature  One or more selected topics of popular literature—for example, science fiction, fantasy, sport, detective fiction, and the best seller. (S -even)

Literature for Adolescents  Fiction, poetry, and drama which meet the needs of upper elementary, middle school, and high school students. (F)

Introduction to Folklore  Collection, classification, and analysis of folklore, with special emphasis on oral literature. (F)

American Folklore  Survey of the unofficial culture which has helped to shape the American experience, with special emphasis on oral literature, conventional belief, and traditional lifeways. (S -odd)

Native American Verbal Art  Examination of oral literature of the indigenous peoples of North America and of contemporary literature written by American Indians. (S -even)

African-American Folklife  A study of African-American culture through New World black traditions, including oral narratives and folksongs. (F -even)

Advanced Creative Writing  Writing poetry, fiction, or drama. Prerequisite: ENG 3023 or permission of instructor. (S)

Theory in the Teaching of Composition  An introduction to teaching composition based on current research and theory with special emphasis on practical applications in the second school classroom (S).

The English Language  Historical, structural, and linguistic development of the English language, emphasizing sound change and analysis of spoken and written English. (F -even)

Comparative Modern Grammars  Major grammatical systems: traditional, structural, and transformational. (S)

Introduction to Linguistics  Phonetics, phonemics, morphology, syntax, and semantics. (F -odd)

See the ASU web page (www.astate.edu) for current bulletin information.
4103. Introduction to Contemporary Literary Theory  An introduction to the major theoretical approaches to literary criticism, ranging from formalism through post-structuralism. (F - odd)

4113. Genre Studies: Tragedy, Comedy, Romance or Epic  Studies in one of four genres in all its formal aspects and changing manifestations in literature, including fiction, drama, and poetry. (S - even)

4183. Renaissance Drama Excluding Shakespeare  Familiarizes the student with the contemporaries of Shakespeare in the Elizabethan/Jacobean theatre. Some familiarity with Shakespeare helpful, but not essential. (S - even)

4213. Medieval Literature  English literature during the Middle Ages. Selected continental writings may be included. (S - odd)

4223. Milton  An intensive study of selected works of John Milton. (F - odd)

4233. Sixteenth-Century Literature English literature during the sixteenth century. Selected continental writings may be included. (S - even)

4243. Seventeenth-Century Literature  English literature during the seventeenth century. Selected continental writings may be included. (F - even)

4253. Restoration and Neoclassical Literature  English literature during the late seventeenth and eighteenth centuries. Selected continental writings may be included. (S - even)

4263. Romantic Literature  Major currents and figures of the English Romantic movement. Selected background writings may be included. (F - even)

4273. Victorian Literature  Major currents and figures in the Victorian Age. Selected background writings may be included. (S - odd)

4283. Modern British Literature  English literature in the twentieth century. Selected background writings may be included. (F - odd)

4333. American Romanticism  American literature in the first half of the nineteenth century. (S - odd)

4353. American Realism and Naturalism  American literature in the second half of the nineteenth century and the early twentieth century. (S - even)

4363. African-American Literature  Survey of African-American literature from its beginnings to the present. (S - odd)

4373. Modern American Literature  American literature since World War I. (S - even)

4383. Minority Literature Selected works of American minority writers from such groups as Blacks, Native Americans, or Chicanos. (F - even)

4463. Special Topics  Intensive study of individual authors, limited periods, movements, or specific theme. (S - even)

4473. Women Writers  A study of literature written by women. (S - odd)

4613. Ballad and Folksong  Analysis and interpretation of oral poetry, especially that of the English-speaking world. (F - odd)

4623. Mythology  Content, structure, and belief systems of various mythologies from the perspectives of selected mythographers. (S - odd)

4633. Material Folk Culture  The analysis and interpretation of traditional skills, services, and art/craft objects provided in folk societies. (S - even)

4643. Independent Fieldwork in Folklore  Development and implementation of a research agenda, using standard field methods in folklore studies such as the taped-recorded interview and participant observation. Prerequisites: ENG 3613 and permission of instructor. (F, S)

4703. Persuasive Writing  Practice in reading and writing persuasive texts, with study of theories relating to rhetoric and persuasion. (F)

Philosophy (PHIL)

1103. Introduction to Philosophy  Basic problems of philosophy based upon readings in the works of selected leading philosophers. A prerequisite for upper-level philosophy. (F, S)

1503. Logic and Practical Reasoning  Methods and principles used in distinguishing correct from incorrect reasoning, designed to give the student a working knowledge of the detection of fallacies, the definition of terms, and the recognition of deductive and inductive thought. (F, S)

3123. History of Ancient and Medieval Philosophy  Development of Western philosophy from the time of the Pre-Socratics to the end of the Middle Ages. (F - even)

3223. History of Modern Philosophy  Development of Western philosophy from the Renaissance to the present. (S - odd)

3313. Philosophy of Religion  Basic religious beliefs and practices, with emphasis on the problems of reason and revelation, the existence and nature of God, evil and immortality. (F - odd)

3403. Theory of Knowledge  Basic questions about the nature of human knowledge with emphasis on truth, evidence, and justification. (F - even)

3423. Philosophy of Science  Provides critical examination of methods and presuppositions of science. (F - odd)

3553. Symbolic Logic  Rigorous treatment of sentential logic and predicate logic, and basic issues in metatheory. Prerequisite: PHIL 1503 or MATH 1023 or consent of instructor. (D)

3623. Eastern Philosophy  Major non-western philosophical traditions including Hinduism, Taoism, Buddhism, and Confucianism. (S - even)

3703. Philosophy of Law  Conceptual and ethical questions relating to law and philosophy, including analytical jurisprudence, the justification of punishment, etc. (S - odd)

3713. Ethics in the Health Professions  Examination of the moral and conceptual issues raised in the practice of medicine and the attendant medical technology. (S)

3723. Computers, Ethics, and Society  Introduction to moral, professional, and legal issues involving computer hardware and software. Prerequisite: PHIL 1103 or permission of instructor. (S - even)

4213. Contemporary Philosophy  Major trends in contemporary philosophy, particularly British Empiricism, European Existentialism, and American Pragmatism. (S - odd)

4403. Metaphysics  Introduction to basic issues in analytic metaphysics including philosophy of mind, personal identity, determinism, realism, supervenience, and modalities. (F - odd)

4443. Philosophy of Mind  Foundational issues in the study of mind: includes the nature of mind, the relation of psychology to physical science, and theories of mental content. Prerequisite: PHIL 1103 or permission of instructor. (S - even)
4703. Contemporary Ethical Issues Examination of important recent theories of the nature or content of moral language, judgments, and norms. (F -even)

4723. Aesthetics The nature of art, designed to help students respond intelligently to works of art. (F -even)

4733. Environmental Ethics An investigation of the ethical dimensions of environmental issues. Prerequisite: PHIL 1103. (F -odd)

4743. Social and Political Philosophy Explores the justification, or lack thereof, of social and political institutions. Prerequisite: PHIL 1103, Introduction to Philosophy, equivalent, or instructor's permission. (F -even)

4801-2-3. Readings in Philosophy Independent readings for advanced students only. Must have consent of department chair. May be repeated for a maximum of 6 hours credit. (F, S)

4883. Philosophical Classics Advanced study of selected central works in philosophy. Content will vary. Prerequisite: 9 hours of philosophy. (D)

DEPARTMENT OF HISTORY

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

General History (HIST)

3203. The History of Law Law from primitive beings in early societies through the English Common Law; development of law in America. (D) (Recommended for Pre-Law students)

3213. Introduction to Museum Work Emphasizes both theory and hands-on experience in administration, collections, management, exhibition techniques, museum education, and documenting artifacts. (S)

3293. History of Science The emergence of modern science since 1500. Thematic studies to illuminate revolutionary change in science and the impact of science-based technology on society. (S -even)

3333. (4333) The Practice of History Experiential study of historical scholarship: research, writing, and criticism. To be taken at the beginning of the major. (Required for all history degrees.) (F, S)

4303. The Idea of History Study of the idea of history in its chronological, practical, and historiographical manifestations. (S)

4312. Computer Technology for the History/Social Sciences Educator Hands-on experience in evaluating, creating and using history web sites and software, and developing presentation skills using the computer, for teaching in the secondary classroom. (S, SU)

4513. Museum Collections Management An overview of the management and preservation of material culture in museums. Policy development, documentation and care of collections are broad topic areas. (D)

4601-2-3. Special Problems in History Individual problems in history for juniors and seniors, arranged in consultation with a professor. Must be approved by the department chair. (D)

See the ASU web page (www.astate.edu) for current bulletin information.
3723. The History of Rural America Rise and decline of rural America and its impact on society. (SU - even)
3743. The Urban Revolution in America Evolution of the American city and its impact on society. (S - even)
3753. History of American Technology Development and institutionalization of technology in American society to the present. Includes innovation in homes, business, agriculture, transportation, construction, medicine, and government. (S)
3773. American Economic Development Structure and evolution of American economic development with emphasis on the problems of agriculture, labor, transportation, and business. (S - even)
3813. The United States in World War I U.S. military involvement in World War I and the social, economic and political impact of the war on American society. (F)
3823. The United States in World War II American military involvement in World War II and the social, economic and political impact of the war on American society. (S)
4113. Colonial North America Colonial development from Jamestown through the American Revolution. (F - even)
4123. Foundations of the American Republic, 1783-1850 Major political and social developments between the Revolution and the Civil War. (SU - odd)
4143. Colonial North America Colonial development from Jamestown through the American Revolution. (F - even)
4153. The Rise of Modern Japan Major political and social developments between the Revolution and the Civil War. (SU - odd)
4163. The Rise of Modern Japan Major political and social developments between the Revolution and the Civil War. (SU - odd)
4183. Medieval Europe Europe from 500 to 1500 with emphasis on social institutions. (S - odd)
4193. The Crusades Medieval Crusading and Crusaders: the wars, religions, politics, economics, social effects and lasting legacies of the Crusade movement. (F - odd)
3223. Renaissance and Reformation Europe Political, economic, and cultural change in post-medieval Europe, 1350 to 1600.
3233. Age of Science and Reason Europe between the sixteenth and eighteenth centuries. (S - even)
3253. Modern Europe, 1750-1870 Europe during the French and Industrial Revolutions; a study of the nation state system and imperialism. (F - odd)
3273. The Age of Crisis: Europe, 1870 to Present World War I, the rise of Fascism, Communism, and the Welfare State. (S - even)
3283. Society and Thought in Europe Evolution of leading European cultural values against the background of socioeconomic change, 1500 to the present. (F - even)
3303. The Modern History of the Middle East: 1800 to the Present Major developments in Middle Eastern history with emphasis on the twentieth century. (F - odd)
4113. Imperial Russia Russian history to the Revolution of 1917. (F - odd)
4123. Soviet Russia The U.S.S.R., 1917 to present. (S - even)
4133. History of Ancient China Ancient Chinese civilization from the founding of the Shang Dynasty (1766 B.C.) to the end of the Three Kingdoms Period (A.D. 280). (D)
4143. The Rise of Modern China Major developments in Chinese history with emphasis on the twentieth century. (F - odd)
4153. The Rise of Modern Japan Major developments in Japanese history with emphasis on the twentieth century. (S - odd)
4213. History of England, 55 B.C. to A.D. 1689 The social, political, and ecclesiastical history of England from Julius Caesar's reconnaissance to the Glorious Revolution. (F - even)
4223. History of Great Britain: 1688 to 1982 The social, political, economic, and imperial history of Great Britain from the Glorious Revolution to the Falklands War. (S - odd)
4253. The Rise of Modern Germany Germany and its role in world affairs since 1648, with emphasis on the period from Bismarck to Hitler. (F - even)
4273. History of Mexico Emphasizes contemporary developments and relations with the United States. (S - odd)
4553. History of Medicine Worldwide survey of medicine, disease, and health from prehistoric times to the present. (F - odd)
4593. Special Topics in World History Topic varies, but especially emphasizes new developments in World History. May be repeated for credit with different subtitle. (D)

See the ASU web page (www.astate.edu) for current bulletin information.
DEPARTMENT OF LANGUAGES

Arabic (AR)

1036. Accelerated Elementary Arabic  Pronunciation and basic grammar, simple speaking and listening comprehension skills, and cultural understanding of the Arabic world. (F)

2036. Accelerated Intermediate Arabic  Further development of listening and speaking skills, with increasing emphasis on reading and writing. Prerequisite: AR 1036 (S)

French (FR)

NOTE: Except by consent of instructor FR 2023 or FR 2036 is a prerequisite for all French courses at the 3000 and 4000 levels.

1013. Elementary French I  Practice toward developing basic proficiency in listening comprehension, speaking, reading, writing, and cultural understanding of the French-speaking world. (F)

1023. Elementary French II  Continuation of FR 1013. Prerequisite: FR 1013 or consent of department chair. (S)

1036. Accelerated Elementary French I & II  Intensive one-semester course that covers the material of instruction designed for a regular academic year. (F)

2013. Intermediate French I  Continues the development of the basic language skills, with increasing emphasis on the written elements of the language. Prerequisite: FR 1023 or FR 1036 or consent of department chair. (F)

2023. Intermediate French II  Continuation of FR 2013. Prerequisite: FR 2013 or consent of department chair. (S)

2036. Accelerated Intermediate French I & II  Intensive one-semester course in Intermediate French designed to cover the material programmed for the regular second year of French. Prerequisite: FR 1036 or FR 2023 or consent of department chair. (S)

3013. French Phonetics  Intensive work on the sound system of French to develop skills in pronunciation and listening comprehension. (F-even)

3023. French for Reading Knowledge  Learning to read and translate French with the aid of a dictionary. For the student with no previous preparation in the language. (Completion of this course does not satisfy the undergraduate language requirement. Completion of this course with a grade of "B" or better is required to satisfy the graduate reading requirement in a foreign language.) (F)

3183. French Conversation  Practice toward developing facility in oral expression in various everyday situations. (F-even)

3203. Advanced French Conversation  A continuation of FR 3183. Prerequisite: FR 3183. (S-odd)

3413. Introduction to French Literature  An introduction to French literature from the Middle Ages to the present day with selections from literary masterpieces representing the major trends of each period. (D)

3463. Advanced French Grammar  Grammar and structure of the French language in order to develop students' facility in the written language. (F-odd)

3473. French Composition  Practice in writing in order to develop precision in grammar and vocabulary, sensitivity toward levels and styles of language, and appropriate strategies for various rhetorical contexts. Prerequisite: FR 3463 or consent of instructor. (S-even)

3613. French Civilization  The historical background, the geographical setting, and the spirit and character of the French, together with some treatment of the literature, arts, sciences, and institutions of France. (F-odd)

3623. Contemporary France  Readings and discussions on post-war French political and social history, mentalities, and current problems. (S-odd)

3703. French for International Business  Readings, exercises, and discussions to teach specialized vocabulary and understanding of business practices in the French-speaking world for students interested in careers in international trade. (D)

4413. Survey of French Literature I  Study of selected texts from the Middle Ages to the end of the eighteenth century emphasizing critical analysis in the historical context. (F-odd)

4423. Survey of French Literature II  Study of selected texts from the nineteenth century to the present, emphasizing critical analysis in the historical context. (S-even)

4503. Special Topics  Advanced study in a particular area of literature, culture, or language. Topic varies. May be repeated when topic changes. (S-even, F-even)

4601-2-3. Special Project in Teaching  An independent study and practical application of selected professional topics in language teaching. May not be used to satisfy any major requirements. May be repeated for up to six hours credit. Prerequisite: consent of department chair. (D)

4801-2-3. Independent Study in French  Independent course of study in French for advanced students only. Must have consent of department chair. May be repeated for up to six hours of credit for majors and up to three hours of credit for minors. (D)

German (GER)

NOTE: Except by consent of instructor and department chair, unless otherwise indicated, GER 2023 is a prerequisite for all upper-level German courses.

1013. Elementary German I  The listening-speaking-reading-writing approach to develop basic language skills. (F)

1023. Elementary German II  Continuation of GER 1013. Prerequisite: GER 1013 or consent of department chair. (S)

2013. Intermediate German I  Continues the development of the basic language skills, with increasing emphasis on the written elements of the language. Prerequisite: FR 1036 or FR 1023 or consent of department chair. (F-odd)

2023. Intermediate German II  Continuation of GER 2013. Prerequisite: GER 2013 or consent of department chair. (S)

2036. Accelerated Intermediate Arabic  Pronunciation and basic grammar, simple speaking and listening comprehension skills, and cultural understanding of the Arabic world. (F)

3023. German for Reading Knowledge  Learning to read and translate German with the aid of a dictionary. For the student with no previous preparation in the language. (Completion of this course does not satisfy the undergraduate language requirement. Completion of this course with a grade of "B" or better is required to satisfy the graduate reading requirement in a foreign language.) (F)

3183. German Conversation  Practice toward developing facility in oral expression in various everyday situations. (F-even)

3203. Advanced German Conversation  A continuation of FR 3183. Prerequisite: FR 3183. (S-odd)

3413. Introduction to German Literature  An introduction to German literature from the Middle Ages to the present day with selections from literary masterpieces representing the major trends of each period. (D)

3463. Advanced German Grammar  Grammar and structure of the German language in order to develop students' facility in the written language. (F-odd)

See the ASU web page (www.astate.edu) for current bulletin information.
3173. German Civilization  The historical background, the geographical setting, and the spirit and character of the Germans, together with some treatment of the literature, arts, sciences, and institutions of Germany. (S -odd)

3183. German Conversation  Elements of spoken German with emphasis on the modern idiom. (F -even)

3213. Survey of German Literature I  Includes the principal literary movements in Germany from the Middle Ages to the Romantic Period. (D)

3223. Survey of German Literature II  Includes the principal literary movements in Germany from the Romantic Period to the present. (D)

3413. Introduction to German Literature  Introduction to poetry, drama, and short prose; develops further the students' reading skills and introduces them to analysis and explication of the literary text. Prerequisite: GER 2023. (S-even)

4801-2-3. Readings in German  Independent readings for advanced students only. Limited to three hours. Must have consent of department chair. (D)

Spanish (SPAN)

NOTE: Except by consent of instructor and department chair SPAN 2023 or SPAN 2036 is a prerequisite for all Spanish courses numbered at the 3000 and 4000 levels.

1013. Elementary Spanish I  The listening-speaking-reading-writing approach to develop basic language skills. (F,S,SU)

1023. Elementary Spanish II  Continuation of SPAN 1013. Prerequisite: SPAN 1013 or consent of department chair. (F,S,SU)

1036. Accelerated Elementary Spanish I & II  Intensive one-semester course that covers the material of instruction designed for a regular academic year. (F, S)

2013. Intermediate Spanish I  Further development of basic language skills, with increasing emphasis on the written elements of the language. Prerequisite: SPAN 1023 or consent of department chair. (F,S,SU)

2023. Intermediate Spanish II  Continuation of SPAN 1013. Prerequisite: SPAN 2013 or consent of department chair. (F,S,SU)

2036. Accelerated Intermediate Spanish I & II  Intensive one-semester course in Intermediate Spanish designed to cover the material programmed for the regular second year of Spanish. Prerequisite: SPAN 1036 or SPAN 1023 or consent of department chair. (F,S)

3013. Spanish Phonetics  Provides a developmental study of sound production in Spanish through study and various modes direct application/interaction. (S -even)

3183. Spanish Conversation I  Practice toward developing facility in oral expression in various everyday situations. (F)

3203. Spanish Conversation II  Practical strategies for effective communication in Spanish with emphasis on the development of skills for the exchange of ideas in the target language. Prerequisite: SPAN 3183 or consent of instructor. (S)

3303. Grammar and Composition I  Extensive practice in writing descriptive, narrative, and expository essays, including a review of the grammar of the language. (F)

3403. Grammar and Composition II  As a continuation of SPAN 3303, the course offers extensive practice in writing expository essays utilizing analysis and classification, comparison and contrast, argumentation, as well as practice in writing papers which interpret research. Prerequisite: 3303 or consent of instructor. (S)

3413. Introduction to Hispanic Literature  An introduction to poetry, drama, novel, and short story with emphasis on analytical reading. (F, S)

3623. Culture and Civilization: The Américas  A panoramic approach to the histories, geographies, social constructs, and political scenarios of the Spanish-speaking Americas. Prerequisite: SPAN 3183 or consent of instructor. (S -odd)

3633. Culture and Civilization: Spain  A broad approach to the history, geography, social constructs, and political scenarios of Spain. Prerequisite: SPAN 3183 or consent of instructor. (S-even)

3703. Spanish for International Business  Oral and written training in vocabulary and idiomatic expressions used in international trade transactions. Listening, speaking, reading, and writing are targeted, with the objective of preparing students to handle diverse international business transactions in Spanish. (S-odd)

4413. Survey of Peninsular Spanish Literature  An intensive study of the principle literary movements and genres in Spain from the Middle Ages to the Generation of ’98. Prerequisite: SPAN 3413 or consent of instructor. (F-odd)

4423. Contemporary Peninsular Spanish Literature  An intensive survey of the principle literary movements and authors in Spain from the Generation of ’98 to the present. Prerequisite: SPAN 3413 or consent of instructor. (S -even)

4443. Survey of Latin American Literature  An intensive survey of the principal literary movements and authors in Latin America from the Colonial Period to the present. Prerequisite: SPAN 3413 or consent of instructor. (F -even)

4503. Special Topics  Advanced study in a particular area of literature, culture, or language. Topic varies. May be repeated when topic changes. Prerequisite: SPAN 3413 or consent of instructor. (F -odd)

4601-2-3. Special Project in Teaching  Independent study of selected professional topics in language teaching. May not be used to satisfy any major requirements. May be repeated for up to six hours credit. Prerequisite: consent of department chair. (D)

4801-2-3. Independent Study in Spanish  For advanced students only. May have consent of department chair. May be repeated for up to six hours of credit for majors and up to three hours of credit for minors. (D)

DEPARTMENT OF POLITICAL SCIENCE

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

General Politics (POSC)

1003. Introduction to Politics  An introduction to the use of politics for the resolution of conflict in communities, nations, and the international system through the study of political concepts and relationships, with applications to current problems. (F, S)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2103</td>
<td>Introduction to United States Government</td>
<td>The constitution, government, and politics of the United States. (F, S, SU)</td>
</tr>
<tr>
<td>3113</td>
<td>American Municipal Government</td>
<td>Types of governments in municipalities of the United States. (F, S)</td>
</tr>
<tr>
<td>3123</td>
<td>American Constitutional Law</td>
<td>Constitutional theories as expounded in decisions of the Supreme Court since 1789. Questions such as the nature of law and political theories underlying Supreme Court decisions will be investigated. (F)</td>
</tr>
<tr>
<td>3133</td>
<td>Political Parties and Interest Groups</td>
<td>American political parties and interest groups. (S)</td>
</tr>
<tr>
<td>3143</td>
<td>American State Government</td>
<td>An examination of the powers and institutions and policies of state and local governments. (F, S)</td>
</tr>
<tr>
<td>3153</td>
<td>American Executive Process</td>
<td>Governmental executives and executive processes in the American political system. (S -even)</td>
</tr>
<tr>
<td>3163</td>
<td>Black Politics</td>
<td>Exposes students to the variety of literature on Black people in American politics; political strategies and actions are the major themes. (S -even)</td>
</tr>
<tr>
<td>3173</td>
<td>Civil Liberties</td>
<td>Judicial and statutory interpretations of the fundamental liberties contained in the U.S. Constitution. (S)</td>
</tr>
<tr>
<td>3183</td>
<td>Criminal Law and the Constitution</td>
<td>An examination of state and federal police powers and how they are regulated by the Constitution and statutes. (F, S, SU)</td>
</tr>
<tr>
<td>3193</td>
<td>Arkansas Government and Politics</td>
<td>Introduction to Arkansas government and politics, focusing on the institutions of state government (Governor, General Assembly, Courts), state politics (campaigns and elections, political parties, interest group activity), and selected policy issues facing state government in Arkansas. (S)</td>
</tr>
<tr>
<td>4113</td>
<td>American Legislative Process</td>
<td>Structure and organization of legislative bodies, with a detailed study of legislative processes. (S -odd)</td>
</tr>
<tr>
<td>4123</td>
<td>Women in Politics</td>
<td>The course will explore the role that women play in American politics and policy making, and examine the many different types of women actively reshaping the policy agenda through legislative priorities in state legislatures and Congress. Achieving this goal requires that we investigate how governmental (institutional) and nongovernmental (extra-institutional) forces have contributed to the presence and impact that women, men and questions of gender play in American politics. (S -even)</td>
</tr>
<tr>
<td>3203</td>
<td>Introduction to Comparative Politics</td>
<td>Surveys the field of comparative politics, with case studies of selected countries. (F -odd)</td>
</tr>
<tr>
<td>3213</td>
<td>African Political Systems</td>
<td>The government and politics of primarily sub-Saharan Africa; involves study of the people as well as their political institutions. (F -even)</td>
</tr>
<tr>
<td>3223</td>
<td>American National Defense Policies</td>
<td>Key issues vital to U.S. defense, including strategic force levels; sea, air and land forces; limited war; low intensity conflict; and nuclear non-proliferation. (F -odd)</td>
</tr>
<tr>
<td>4213</td>
<td>Politics of the Former Soviet Lands</td>
<td>Government and politics of Russia and her neighbors, including the transition from communism and issues of war and peace between the republics of the former Soviet Union. (S -even)</td>
</tr>
<tr>
<td>4313</td>
<td>International Organization</td>
<td>Development, structure, and politics of international organizations such as the United Nations. (F -odd)</td>
</tr>
<tr>
<td>4223</td>
<td>Middle Eastern Political Systems</td>
<td>Major Middle Eastern political systems, with concentration on their common characteristics and major differences. (S -odd)</td>
</tr>
<tr>
<td>1303</td>
<td>Introduction to Model United Nations</td>
<td>Preparation for and participation in model United Nations. (F, S)</td>
</tr>
<tr>
<td>3303</td>
<td>Introduction to International Politics</td>
<td>Various approaches to the study of international politics. (F -even)</td>
</tr>
<tr>
<td>3313</td>
<td>American Foreign Policy</td>
<td>Development, formation, goals, administration, and realities of American foreign policy in modern times, with emphasis on current issues. (S)</td>
</tr>
<tr>
<td>3323</td>
<td>American National Defense Policies</td>
<td>Key issues vital to U.S. defense, including strategic force levels; sea, air and land forces; limited war; low intensity conflict; and nuclear non-proliferation. (S)</td>
</tr>
<tr>
<td>4313</td>
<td>International Organization</td>
<td>Development, structure, and politics of international organizations such as the United Nations. (F -odd)</td>
</tr>
<tr>
<td>3413</td>
<td>Classical and Medieval Political Theory</td>
<td>Classical Greek and Christian forms of political theory. (F -odd)</td>
</tr>
<tr>
<td>3423</td>
<td>American Political Theory</td>
<td>An analytical study of American political theories from the pre-colonial era to the present and their impact upon our political institutions. (S -odd)</td>
</tr>
<tr>
<td>3433</td>
<td>Political Ideologies</td>
<td>Contemporary political ideas and movements, including liberalism, conservatism, anarchism, fascism, communism, and nationalism. (F -even)</td>
</tr>
<tr>
<td>4413</td>
<td>Modern Political Theory</td>
<td>Writings of modern political philosophers such as Machiavelli, Hobbes, and Rousseau. (S)</td>
</tr>
<tr>
<td>4453</td>
<td>Analysis of Contemporary Political Theory</td>
<td>An analytical and theoretical examination of one or more theoretical political issues of the 20th and 21st centuries. Topics of analysis may include democracy, justice, community, political ethics, multiculturalism, or the theories of a particular political philosopher or school of political philosophy. Content will vary.</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3503</td>
<td>Principles of Public Administration</td>
<td>Survey of the field of public administration and its problems. (S)</td>
</tr>
<tr>
<td>3513</td>
<td>Public Budgeting Process</td>
<td>The public budgeting processes of the United States and of Arkansas; administrative and political problems connected with raising and expending public revenues. (S-every)</td>
</tr>
<tr>
<td>4503</td>
<td>Introduction to Public Policy Studies</td>
<td>Provides a framework for understanding the fundamentals of the policymaking process. (F)</td>
</tr>
<tr>
<td>4523</td>
<td>Public Personnel Administration</td>
<td>Policies, methods, and techniques utilized in public personnel. (F)</td>
</tr>
<tr>
<td>4533</td>
<td>Environmental Law and Administration</td>
<td>Overview of current environmental law, its administration and enforcement.</td>
</tr>
<tr>
<td>3003</td>
<td>Introduction to Political Analysis</td>
<td>Introduction to the discipline of political science, its subfields, and to the use of the social scientific method and logical inquiry. (F)</td>
</tr>
<tr>
<td>4801-2-3</td>
<td>Readings in Political Science</td>
<td>Independent readings for all advanced students regardless of major. Limited to three hours. Students must have consent of instructor and department chair. (F, S, SU)</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
College of Nursing and Health Professions

Professor Susan Hanrahan, Dean

The College of Nursing & Health Professions was constituted with the beginning of the academic year 1982, and came about as a result of the inclusion of three programs which had been offered in other units of the university. The undergraduate programs of the college are baccalaureate degree curricula in nursing, clinical laboratory sciences, communication disorders, radiologic imaging specialist, radiation therapy, diagnostic sonography, nuclear medicine, and social work, and associate degree programs in clinical laboratory science, nursing, physical therapist assistant, and radiologic technology. Information on graduate programs in the college (communication disorders, nursing, health sciences, and physical therapy) can be found in the ASU Graduate Bulletin.

Accreditation and Registration

Both the associate degree and the baccalaureate degree programs in nursing are approved by the Arkansas State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC) (61 Broadway, New York, NY 10006; telephone: 211-363-5555, X153). Upon completion of these programs the student is eligible for the National Council of State Boards of Nursing Licensing Examination (NCLEX-RN), and after passing the examination, is licensed as a Registered Nurse by the state(s) to which application was made.

The Clinical Laboratory Scientist and Clinical Laboratory Technician programs are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631, 773-714-8880. Graduates of these programs are eligible for the national certifying examinations in their specialty through the American Society of Clinical Pathologists or other appropriate agency.

The baccalaureate degree in Communication Disorders is a preprofessional degree designed to prepare students for graduate study in speech-language pathology. Both curriculum and practicum experiences have been designed to partially fulfill requirements for the baccalaureate degree in Communication Competence as issued by the Council on Academic Accreditation of the American Speech-Language Hearing Association.

Both the Master of Physical Therapy (MPT) and the Physical Therapist Assistant (PTA) programs are accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 N. Fairfax Street, Alexandria, VA 22314, 703-706-3245.

The Radiologic Technology and Radiation Therapy programs are accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Dr., Suite 900, Chicago, IL, 60606-2901. Graduates are eligible to sit for the national certifying examination of the American Registry of Radiologic Technologists. The Nuclear Medicine Program is accredited by the Joint Review Committee on Education in Nuclear Medicine Technology. The Diagnostic Medical Sonography Program has applied for accreditation from the Joint Review Committee for Education in Diagnostic Medical Sonography.

The Social Work Program is accredited by the Council on Social Work Education, CSWE, 1725 Duke Street, Suite 500, Alexandria, VA 22314, 703-683-8099. Most state and national board application forms ask if the applicant has ever been convicted of a crime. Certain crimes (e.g., controlled substance use or sale) may make the applicant ineligible for the examination. If a student has any reason to believe that he/she may be ineligible for the state or national board examinations, he/she should discuss this with the program director or the respective licensing agency.

Application Policies and Procedures

Admission to Arkansas State University does not automatically admit one to the programs offered by the College of Nursing and Health Professions. The college has a selective admissions policy due to professional requirements and limited clinical sites for placement of students. All remediation requirements must be completed prior to beginning the professional component of any Nursing or Health Professions program.

For a listing of the criteria used by admission committees in selecting students for the various programs, contact the appropriate department chair or program director (Nursing 972-3074; Clinical Laboratory Sciences 972-3073; Radiologic Sciences 972-3073; Physical Therapy 972-3591; Communication Disorders 972-3106; Social Work 972-3984). Courses in clinical laboratory sciences, physical therapist assistant, radiologic sciences, radiologic technology, and nursing (with the exception of NRS 2203, NRS 3353, NRS 3333, NRS 4393, NRS 3392 and NRS 3991), are open only to students admitted to the professional level of those respective programs. Some courses with an HP prefix are open to any student who meets the university admission requirements. Enrollment in certain 3000 and 4000 level CD courses requires admission to the undergraduate communication disorders program.

After being admitted to Arkansas State University, students should obtain an application form from the department or program office. The application, together with other required materials, must be submitted in accord with the deadlines listed below. All transcripts and documents submitted in support of an application become the property of the university and cannot be returned to the applicant or forwarded to another school or individual.

Students seeking admission to an ASU nursing program after withdrawing from or being dismissed from another nursing program must submit with their application a letter of good standing from each such nursing program attended. Students are ineligible for enrollment into the 4th/Final semester of the AASN program.

Deadline for Receiving Applications

Clinical Laboratory Sciences - Bachelor of Science: March 15 of the sophomore year for the junior-senior clinical years. Prior to this time the student is enrolled in the clinical laboratory science program as a pre-clinical laboratory scientist major.

Clinical Laboratory Sciences - Associate in Applied Science: March 15 for official admission to the Fall semester. Prior to this time, the student is enrolled in the clinical laboratory science program as a pre-clinical laboratory science technician major.

Communication Disorders - Bachelor of Science: No deadlines. Admission to the undergraduate communication disorders program requires the following: 3.1 or better GPA for the first semester of Clinical Competence as issued by the Council on Academic Accreditation of the American Speech-Language Hearing Association.

Communication Disorders - Associate in Applied Science: No official deadlines. Admission to the traditional Associate in Applied Science in Communication Disorders program requires the following: 3.1 or better GPA for the first semester of Clinical Competence as issued by the Council on Academic Accreditation of the American Speech-Language Hearing Association.

Application in Applied Science in Nursing: March 15 for admission to the Fall semester for LPN to RN transition students at campus site and distance-learning sites; November 15 for transfer/admission/readmissions for subsequent semester. These deadlines pertain to all distance learning sites except Mountain Home. Deadline for traditional AASN program at the Mountain Home campus is November 1. Applicants must complete prerequisite support courses with a cumulative GPA of 2.0 or better. A “C” or better must be earned in required math and science courses. Applicants for admission will be ranked based upon cumulative GPA.

Bachelor of Science in Nursing: March 15 for Fall enrollment in sophomore nursing courses. November 15 and June 15 for LPN and transfer/admission/readmissions for subsequent semester. Registered nurses must apply during the semester enrolled in NRS 3312. Applicants must complete required prerequisite supports courses with a cumulative GPA of 2.5 or better. A “C” or better must be earned in required math and science courses. Due to space availability, applicants for admission will be ranked based upon cumulative GPA or the last 30 semester hours (calculated on entire semester’s work), depending on which average is the highest.

Students seeking readmission, advance standing or transfer credit for nursing courses must be aware that nursing knowledge changes rapidly. Therefore, if three or more years have elapsed since the previous education experience, students may be required to meet additional requirements before progression in a specific nursing program.
ASU does offer the Master of Physical Therapy degree (MPT). Deadlines for application can be obtained by contacting the program office at 870-972-3591.

Physical Therapist Assistant - Associate in Applied Science: Students are encouraged to declare as pre-Physical Therapist Assistant (pre-PTA) majors. Students may apply to the PTA program during the spring semester of the year in which they plan to start the program. Application deadline is April 1 of each year.

Radiologic Technology - Associate in Applied Science: April 1 for admission to the first summer session. Students are accepted based on 1) cumulative GPA (a 2.5 GPA is required); 2) Pre-requisite course GPA; 3) Essay scores; 4) reference scores; 5) interview scores. NOTE: Students completing pre-requisite work at ASU-Jonesboro receive extra points toward admission score. Those students wishing to pursue the associate degree only should check the appropriate box on the application.

Imaging Specialist - Bachelor of Science in Radiologic Sciences: Clinical Specialties are offered in Mammography, Computed tomography, Magnetic Resonance Imaging, and Cardiovascular-Interventional Technology. Admission is granted at the beginning of each semester. Only applicants who have 1) completed the associate degree in Radiologic Technology from a Joint Review Committee on Education in Radiologic Technology (JRCERT) approved program OR 2) graduated from a JRCERT approved school of Radiologic Technology AND passed the national certification boards through the American Registry of Radiologic Technologists will be considered.

Radiation Therapy - Bachelor of Science in Radiologic Sciences: April 1 for Fall enrollment. Students are accepted based on 1) cumulative GPA 2) selected course grades 3) interview 4) number of hours completed toward degree. All three are converted to a point system. Students wishing to apply to the Radiation Therapy program must have completed at least one year of an accredited school of Radiologic Technology or have graduated. ASU graduates receive extra points when calculating total scores.

Diastolic Medical Sonography - Bachelor of Science in Radiologic Sciences: April 1 for Summer I enrollment. Students are accepted based on 1) cumulative grade point average 2) selected course grades 3) orientation session 4) personal essay completed at the orientation session. Preference given to those who are near successful completion of the General Education Curriculum and the Radiologic Sciences core courses. To be eligible to apply students must 1) complete an accredited school of radiologic technology or 2) complete the requisite courses outlined in the Bulletin.

Nuclear Medicine Technology - Bachelor of Science in Radiologic Sciences: April 1 for Fall admission. Students are accepted based on 1) cumulative GPA 2) orientation session 3) interview. Students should see the Director of Radiologic Sciences Programs for further details.

Social Work — Bachelor of Social Work: Students must be admitted to the program before the fall semester. Students will be allowed to take SW 4271 Field I, Social Work Research, in the summer session. Specific due dates for materials will be posted on the notice board outside the departmental office. Students should follow the criteria in the Social Work Student Handbook available on the web.

Students will be notified in writing of the decision of the admissions committee. It is the responsibility of each student to see that all required documents have been received by the appropriate program in the College of Nursing and Health Professions by the deadline date. No student will be considered for admission until the file is complete.

Disclaimer

Given the rapid changes in health care and technology, the programs in the College of Nursing and Health Professions reserve the right and responsibility to revise the curriculum to anticipate societal needs for health care. Therefore, students are strongly advised to contact the program directors for current requirements.

Students admitted to any College of Nursing and Health Professions program must meet the program's professional course requirements stated in the ASU Undergraduate Bulletin in effect the academic year of their admission to the professional program.

Vaccination and Skin Testing

Students ADMITTED to any program in the College of Nursing and Health Professions must present the following immunization and test documentation:

1. Rubella and rubeola (Arkansas statute).
2. Mumps and varicella vaccination or titer (clinical affiliate (hospital) requirements when working with infants and children).
3. If no hepatitis immunization or titer, then must begin the Hepatitis B vaccine series prior to enrolling in a clinical practicum class. All students except C.D. must have completed the Hepatitis B series before enrolling in the first practicum course of their program.
4. TB skin test each year that the student is enrolled in a clinical practicum. If skin test is positive, documentation of treatment status must be submitted.
5. Cardiopulmonary resuscitation (CPR) certification is required before taking any practicum courses. Certification status must be maintained and documentation submitted to the appropriate department throughout enrollment in any program.

Radiologic Sciences Film Badge Fees

Students accepted into the Radiologic Technology program will be assessed an annual charge of $120.00 per year ($240 total) for radiologic film badges. Payment is due to the office of the program director prior to Clinical Practicum I and III. These badges will be used during the six clinical practicums.

Students accepted into the Radiation Therapy or Imaging Specialist programs will be assessed a one-time charge of $120. Payment is due in the Program Director's office prior to the first clinical practicum.

Malpractice Insurance

Before being assigned to clinical practicums all students in Health Professions' programs are required to purchase malpractice/liability coverage. Assistance in arranging for coverage will be made through program directors.

Student Employment

Programs in the College of Nursing and Health Professions require an unusual amount of the students' time, and students should pay particular attention to the section on "Student Academic Load" in the Academic Policies and Regulations section in this Bulletin. Outside employment may need to be adjusted to course and clinical requirements scheduling.

Transportation

Students are required to provide their own transportation when assigned to all practicums, including field experience in surrounding counties or other states. When determining educational costs, consideration should be given to this additional expense.

Probation, Retention, and Readmission

All programs in the College of Nursing and Health Professions have policies governing probation, retention, and readmission.

Probation

When the cumulative, semester, or session grade point average falls below 2.00, the student in physical therapist assistant, radiologic technology, associate degree nursing, or baccalaureate degree nursing will be placed on probation. At the end of the next semester or session of enrollment the cumulative grade point average must be at least 2.00 for the student to remain in his/her respective program.

See the ASU web page (www.astate.edu) for current bulletin information.
Retention
A student may not continue in the
A. clinical laboratory sciences programs if a grade lower than "C" is received in any CLS course, or the student fails to maintain an overall GPA of 2.00 in his/her respective program.
B. radiologic technology program if a grade lower than "C" is received in any RT course.
C. radiologic sciences program if a grade of lower than a "C" is received in any RS course.
D. associate degree nursing program if a grade lower than "C" is received in a required nursing course, if the student withdraws from a nursing course to avoid a failing grade, or if the cumulative grade point average is less than 2.00 in the required sciences upon entry to the fourth semester nursing courses.
E. baccalaureate degree nursing program if a grade lower than "C" is received in a required nursing course, if the student withdraws from a nursing course to avoid a failing grade, or if the grade is less than 2.00 in the required laboratory sciences upon entry to the sophomore and junior level nursing courses.
F. physical therapist assistant program if a grade lower than "C" is received in any PTA course.
G. social work if a grade lower than "C" is received in any of the listed major courses. Students must maintain a 2.5 GPA to remain in the program.

Readmission
If students are not allowed to continue in a program because of the above stipulations, readmission will be considered only after the student submits a formal application for readmission to the appropriate department or program.
A. Students are not eligible for readmission if
1. the cumulative grade point average is lower than 2.00.
2. the student has received a final grade lower than "C" twice in the same course, or has received a grade lower than "C" in professional courses in two separate semesters in the same program. [In Nursing, withdrawal from a nursing course to avoid a failing grade is considered the same as receiving a grade lower than "C".] 3. the student has received a final grade lower than "C" in two separate nursing courses in the Department of Nursing.
B. Procedures for application for readmission
1. A student must submit to
a. the CLS programs a completed application form obtainable from the program director's office by the deadline date for applications as noted under "Application Procedures."
b. the RT program a completed application form obtainable from the program director's office sixty (60) days prior to the first day of registration of the semester for which readmission is sought.
c. any RS program a completed application form obtainable from the departmental office sixty (60) days prior to the first day of registration of the semester for which readmission is sought.
d. the Department of Nursing a completed Nursing application packet by the deadline date for applications as noted under "Application Procedures."
2. All applications for readmission must include a current and complete official transcript.
3. Readmission to any program will be dependent upon space available, regardless of student qualifications.
The radiographer is a skilled person, qualified by technological education to provide patient services using imaging modalities as directed by physicians qualified to order and/or perform radiologic procedures. Still others are employed as technical advisers and representatives for radiologic equipment and supply manufacturers.

**RADIOLOGIC SCIENCES:** The Radiologic Sciences Program offers the radiologic professional the baccalaureate degree in 4 tracks (or options). These options are 1) Imaging Specialist, 2) Radiation Therapy, 3) Diagnostic Medical Sonography and 4) Nuclear Medicine Technology. The **Imaging Specialist Track** is designed to provide the student with the skills necessary to become an advanced level technologist in one or more of the following modalities: CT, MRI, Vascular Imaging Technology, or Mammography. Upon completion of the baccalaureate degree students are prepared to sit for the advanced registries in one or more of these areas. The **Radiation Therapy Track** provides the student with the skills necessary to become a professional radiation therapist. The **Diagnostic Medical Sonography Track** provides the student with the skills necessary to become a professional medical sonographer. The **Nuclear Medicine Technology Track** provides the student with the skills necessary to become a professional nuclear medicine technologist.

**SOCIAL WORK:** Bachelor's level social workers work with a variety of clients in many settings. The skills learned in the curriculum include interviewing skills, assessment skills, and intervention skills. The BSW qualifies the student to sit for the state exam at the Licensed Social Worker level. The state licensing law outlines the level of practice at this level. This is referred to as the Generalist Practice level.

**Major in Clinical Laboratory Sciences Associate in Applied Science**

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENG 1003 and 1013, Freshman English I and II</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CHEM 1011, Laboratory for General Chemistry I</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>CHEM 1012, General Chemistry I</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>MATH 1023, College Algebra (or higher level math)</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>HIST 2763 or 2773, U.S. History To or Since 1876; OR POSC 2103, Introduction to United States Government</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>CLS 1043, Introduction to Computers; OR MIS 1503, Microcomputer Applications</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

* If the student has not had chemistry previously, then CHEM 1003, Introduction to Chemistry, must be completed first.

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ZOOL 1021, Lab for Human Physiology</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>ZOOL 1023, Human Physiology</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>BIDL 2101, Laboratory for Microbiology for Nursing and Allied Health</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>BIDL 2103, Microbiology for Nursing and Allied Health</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>CLS 1511/1512, Basic Principles and Laboratory for Basic Principles</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>CLS 1521/1531, Body Fluids and Laboratory for Body Fluids</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>CLS 2512/2511, Medical Parasitology and Laboratory for Medical Parasitology</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>CLS 2523/2521, Hematology I and Laboratory for Hematology I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2573/2571, Clinical Immunology and Serology and Laboratory for Clinical Immunology and Serology</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2532/2531, Medical Microbiology I and Laboratory for Microbiology I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2563/2561, Basic Blood Banking and Laboratory for Basic Blood Banking</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2543/2541, Clinical Chemistry I and Laboratory for Clinical Chemistry I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2551, Hematology Disorders for the Clinical Lab Technician</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>CLS 2514, Clinical Practicum I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2524, Clinical Practicum II</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2534, Clinical Practicum III</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2544, Clinical Practicum IV</strong></td>
<td>4</td>
</tr>
</tbody>
</table>

**Total** 72

---

**Clinical Laboratory Sciences Associate in Applied Science**

Following is one suggested sequence in which requirements for the Associate in Applied Science degree in Clinical Laboratory Sciences may be completed. (See pages 23-24 for developmental courses required for students with lower ACT scores.) Students should consult with their advisor for a plan that best meets individual needs.

<table>
<thead>
<tr>
<th>Track</th>
<th>Fall (13 hrs.)</th>
<th>Spring (14 hrs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 1003</td>
<td>ENGS 1013</td>
<td></td>
</tr>
<tr>
<td>MATH 1023</td>
<td>MATH 2023</td>
<td></td>
</tr>
<tr>
<td>CLS 1512</td>
<td>CLS 1521</td>
<td></td>
</tr>
<tr>
<td>CLS 2523</td>
<td>CLS 2511</td>
<td></td>
</tr>
<tr>
<td>CLS 2521</td>
<td>BIDL 2101</td>
<td></td>
</tr>
<tr>
<td>CLS 2525</td>
<td>CS 1043 or MIS 1503</td>
<td></td>
</tr>
<tr>
<td>Summer I (5 hrs.)</td>
<td>CLS 1521</td>
<td></td>
</tr>
<tr>
<td>Summer II (4 hrs.)</td>
<td>CLS 1531</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CLS 2521</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Track</th>
<th>Fall (15 hrs.)</th>
<th>Spring (13 hrs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 1011</td>
<td>CLS 2524</td>
<td></td>
</tr>
<tr>
<td>CHEM 1013</td>
<td>CLS 2541</td>
<td></td>
</tr>
<tr>
<td>CLS 2531</td>
<td>CLS 2543</td>
<td></td>
</tr>
<tr>
<td>CLS 2533</td>
<td>CLS 2551</td>
<td></td>
</tr>
<tr>
<td>CLS 2571</td>
<td>CLS 2561</td>
<td></td>
</tr>
<tr>
<td>CLS 2573</td>
<td>CLS 2563</td>
<td></td>
</tr>
<tr>
<td>HIST 2763 or 2773 or POSC 2103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer I (4 hrs.)</td>
<td>CLS 3514</td>
<td></td>
</tr>
<tr>
<td>Summer II (4 hrs.)</td>
<td>CLS 3524</td>
<td></td>
</tr>
</tbody>
</table>

**Major in Clinical Laboratory Sciences Bachelor of Science**

**General Education Requirements:**

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 .......................... 46-49

**Specific General Education Requirements:**

Students with this major must take the following:

**CHEM 1011, Laboratory for General Chemistry I**

**CHEM 1013, General Chemistry I**

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOL 3193, Genetics</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>ZOOL 2003 and ZOOL 2001, Human Anatomy and Physiology and Laboratory for Human Anatomy and Physiology</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>CHEM 1023/1021, General Chemistry II and Laboratory for General Chemistry II</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CHEM 3031/3010, Organic Chemistry I and Laboratory for Organic Chemistry I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CHEM 3113/3111, Organic Chemistry II and Laboratory for Organic Chemistry II, OR</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 3153, Clinical Biochemistry</strong></td>
<td>3-4</td>
</tr>
<tr>
<td><strong>ZOOL 2010/2011, Anatomy and Physiology II and Laboratory for Anatomy and Physiology II</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 1512/1511, Principles of Clinical Lab Sciences and Laboratory for Principles of Clinical Lab Sciences</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>CLS 1521/1531, Body Fluids and Laboratory for Body Fluids</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>CLS 2512/2511, Medical Parasitology and Laboratory for Medical Parasitology</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>CLS 2523/2521, Hematology I and Laboratory for Hematology I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2532/2531, Medical Microbiology I and Laboratory for Medical Microbiology I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2543/2541, Clinical Chemistry I and Laboratory for Clinical Chemistry I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2551, Hematology Disorders for the Clinical Lab Technician</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>CLS 2514, Clinical Practicum I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2524, Clinical Practicum II</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2534, Clinical Practicum III</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>CLS 2544, Clinical Practicum IV</strong></td>
<td>4</td>
</tr>
</tbody>
</table>

**Total** 53

---

See the ASU web page (www.astate.edu) for current bulletin information.
### Clinical Laboratory Sciences
#### Bachelor of Science

Following is one suggested sequence in which requirements for the Bachelor of Science degree in Clinical Laboratory Sciences may be completed. See pages 23-24 for developmental courses required for students with lower ACT scores. Students should consult with their adviser for a plan that best meets individual needs.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall (15 hrs.)</strong></td>
<td>ENG 1003, CHEM 1013, MATH 1023, ZOOL 2001, ZOOL 2003, CLS 2512, Arts / Humanities (3 hrs.)</td>
</tr>
<tr>
<td><strong>Spring (14 hrs.)</strong></td>
<td>ENG 1013, CHEM 1023, ZOOL 2013, CLS 3153, Bioc 3313, Social Science (Gen. Ed.)</td>
</tr>
<tr>
<td><strong>Session I (5 hrs.)</strong></td>
<td>CLS 2511, Bioc 3313, Social Science (Gen. Ed.)</td>
</tr>
<tr>
<td><strong>Session II (6 hrs.)</strong></td>
<td>BR 102 or Arts / Humanities (3 hrs.)</td>
</tr>
<tr>
<td><strong>Fall (15 hrs.)</strong></td>
<td>CLS 2521, CLS 2523, CLS 2531, CLS 2533, CLS 2571, CLS 2573, CLS 3343</td>
</tr>
<tr>
<td><strong>Spring (14 hrs.)</strong></td>
<td>CLS 2541, CLS 2543, CLS 2561, CLS 2563, CLS 4174, CLS 4211</td>
</tr>
<tr>
<td><strong>Session I (5 hrs.)</strong></td>
<td>CLS 4184</td>
</tr>
<tr>
<td><strong>Session II (6 hrs.)</strong></td>
<td>Bioc 3313</td>
</tr>
<tr>
<td><strong>Fall (15 hrs.)</strong></td>
<td>CLS 4194</td>
</tr>
<tr>
<td><strong>Spring (13 hrs.)</strong></td>
<td>CLS 4214</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
### Communication Disorders Bachelor of Science

Following is one suggested sequence in which requirements for the Bachelor of Science degree in Communication Disorders may be completed. [See pages 23-24 for developmental courses required for students with lower ACT scores.] Students should consult with their adviser for a plan that best meets individual needs.

#### REQUIREMENTS:
- MINIMUM OVERALL GPA OF 2.75
- SPEECH AND HEARING SCREENING
  - "C" OR BETTER REQUIRED IN ENG 1003, ENG 1013, SCOMM 1203, MATH 1023
  - **EARNED GPA OF 3.1 FOR THE SIX ** CLASSES

#### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ENG 1003 Composition I</em></td>
<td>3</td>
</tr>
<tr>
<td><em>ENG 1013 Composition II</em></td>
<td>3</td>
</tr>
<tr>
<td>*MATH 1023 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td><em>SCOM 1203 Speech Communication</em></td>
<td>3</td>
</tr>
<tr>
<td>**ZOOl 2033/1 Human Anatomy/Lab</td>
<td>2</td>
</tr>
<tr>
<td>**PE 1002 Concepts of Physical Activity</td>
<td>2</td>
</tr>
<tr>
<td>1. Social Sciences</td>
<td></td>
</tr>
<tr>
<td>2. Science</td>
<td></td>
</tr>
<tr>
<td>3. Arts &amp; Humanities</td>
<td></td>
</tr>
<tr>
<td>4. Arts &amp; Humanities</td>
<td></td>
</tr>
<tr>
<td><strong>Junior Year</strong></td>
<td></td>
</tr>
<tr>
<td>CD 3033 Speech and Hearing Science</td>
<td>3</td>
</tr>
<tr>
<td>CD 3303 Normal Language Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 3303 Audiology</td>
<td>3</td>
</tr>
<tr>
<td>CD 4033 Behavior Intervention &amp; Consultation</td>
<td>3</td>
</tr>
<tr>
<td>CD 4103 Clinical Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>1. Psychology and Learning</td>
<td>3</td>
</tr>
<tr>
<td>2. Psychology and Learning</td>
<td>3</td>
</tr>
<tr>
<td>3. Statistics</td>
<td>3</td>
</tr>
<tr>
<td>4. Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ENG 2003 Composition I</em></td>
<td>3</td>
</tr>
<tr>
<td><em>ENG 2013 Composition II</em></td>
<td>3</td>
</tr>
<tr>
<td>*CD 2203 Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>*CD 2014 Anatomy &amp; Physiology/Lab</td>
<td>3</td>
</tr>
<tr>
<td><strong>ELSE 2023/1 Char of Indiv. with Disabilities</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>ZOOl 2003</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>ENG 2003</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>ENG 2013</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>MATH 1023</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>PE 1002 Concepts of Physical Activity</strong></td>
<td>2</td>
</tr>
<tr>
<td>1. Social Sciences</td>
<td></td>
</tr>
<tr>
<td>2. Science</td>
<td></td>
</tr>
<tr>
<td>3. Arts &amp; Humanities</td>
<td></td>
</tr>
<tr>
<td><strong>Senior Year</strong></td>
<td></td>
</tr>
<tr>
<td>CD 3033 Speech and Hearing Science</td>
<td>3</td>
</tr>
<tr>
<td>CD 3303 Normal Language Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 3303 Audiology</td>
<td>3</td>
</tr>
<tr>
<td>CD 4033 Behavior Intervention &amp; Consultation</td>
<td>3</td>
</tr>
<tr>
<td>CD 4103 Clinical Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>1. Psychology and Learning</td>
<td>3</td>
</tr>
<tr>
<td>2. Psychology and Learning</td>
<td>3</td>
</tr>
<tr>
<td>3. Statistics</td>
<td>3</td>
</tr>
<tr>
<td>4. Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>

**Undergraduate courses have prerequisite entry into the Communication Disorders Program.**

#### SCREENING INTO UNDERGRADUATE PROGRAM IN CD DOES NOT IMPLY OR GUARANTEE ACCEPTANCE INTO GRADUATE PROGRAM

#### CLASS OPTIONS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2313, Principles of Microeconomics</td>
<td>ECON 2333, Economic Issues &amp; Concepts</td>
<td>HST 2763, The United States to 1876</td>
</tr>
<tr>
<td>ECON 2313, Principles of Microeconomics</td>
<td>ECON 2333, Economic Issues &amp; Concepts</td>
<td>HST 2773, The United States since 1876</td>
</tr>
<tr>
<td>ECON 2313, Principles of Microeconomics</td>
<td>ECON 2333, Economic Issues &amp; Concepts</td>
<td>HST 2763, The United States to 1876</td>
</tr>
<tr>
<td>ECON 2313, Principles of Microeconomics</td>
<td>ECON 2333, Economic Issues &amp; Concepts</td>
<td>HST 2773, The United States since 1876</td>
</tr>
</tbody>
</table>

#### Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Electives</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
</tr>
</tbody>
</table>

**EARNED GPA OF 3.1 FOR THE SIX ** CLASSES

<table>
<thead>
<tr>
<th>Major in Physical Therapist Assistant in Applied Science</th>
</tr>
</thead>
</table>

**General Education Requirements**: | Sem. Hrs. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1003, Composition I and II</td>
<td>6</td>
</tr>
<tr>
<td>HST 2763 or 2773, United States History To or Since 1875; OR</td>
<td></td>
</tr>
<tr>
<td>PHYS 2003, Introduction to United States Government; OR</td>
<td></td>
</tr>
<tr>
<td>MATH 1023, College Algebra or higher level math course; OR</td>
<td></td>
</tr>
<tr>
<td>CIS 1540, Introduction to Computers; OR</td>
<td></td>
</tr>
<tr>
<td>MBS 1503, Microcomputer Applications; OR</td>
<td></td>
</tr>
<tr>
<td>ZOO 2003 and 2001, Human Anatomy and Physiology I and Laboratory for Human</td>
<td>4</td>
</tr>
<tr>
<td>Anatomy and Physiology I; OR</td>
<td>19</td>
</tr>
</tbody>
</table>

* Students who have not had high school biology or chemistry must complete BIOL 1003 and 1001, Biological Science and Biological Science Laboratory, and CHEM 1003, Introduction to Chemistry, in addition to the above.
### Major Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 2116, Patient Care Fundamentals</td>
<td>6</td>
</tr>
<tr>
<td>PTA 2126, Movement Science</td>
<td>6</td>
</tr>
<tr>
<td>PTA 2213, Musculoskeletal PT</td>
<td>3</td>
</tr>
<tr>
<td>PTA 2223, Physical Agents and Massage</td>
<td>3</td>
</tr>
<tr>
<td>PTA 2239, Neuromuscular PT I</td>
<td>3</td>
</tr>
<tr>
<td>PTA 2243, Cardiopulmonary PT</td>
<td>3</td>
</tr>
<tr>
<td>PTA 2252, Clinical Education I</td>
<td>2</td>
</tr>
<tr>
<td>PTA 2303, Neuromuscular PT II</td>
<td>3</td>
</tr>
<tr>
<td>PTA 2323, Seminar</td>
<td>3</td>
</tr>
<tr>
<td>PTA 2333, Clinical Education II</td>
<td>3</td>
</tr>
<tr>
<td>PTA 2343, Clinical Education III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 72**

### Required Support Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 2013, Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2133, Survey of Physics for Health Professions</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2013 and 2011, Human Anatomy &amp; Physiology II and Laboratory for Human Anatomy &amp; Physiology II OR HP 3003 Gross Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>PT 2022, Introduction to Physical Therapy</td>
<td>2</td>
</tr>
<tr>
<td>HP 2013, Medical Terminology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 15**

**Physical Therapist Assistant*

**Associate in Applied Science**

Following is one suggested sequence in which requirements for the Associate in Applied Science degree in Physical Therapist Assistant may be completed. Students should consult with their adviser for a plan that best meets individual needs.

(See Application Policies and Procedures).

#### Freshman Year

**Summer (either session)**

MATH 1023, College Algebra

**Fall**

ENG 1003, Freshman English I
PHYS 2133, Survey of Physics for Health Professions
PSY 2013, Introduction to Psychology
ZOOL 2003, Human Anatomy and Physiology I
ZOOL 2001, Human Anatomy and Physiology I Lab
HP 2013, Medical Terminology

**Spring**

ENG 1013, Freshman English II
POSG 2103, American Government or HIST 2763 or 2773, U.S. History
CS 1043, Introduction to Computers or MIS 1003, Microcomputer Applications
ZOOL 2013, Human Anatomy and Physiology II
ZOOL 2011, Human Anatomy and Physiology I Lab
PT 2022, Introduction to Physical Therapy

#### Sophomore Year

**10-Week Summer**

PTA 2116, Patient Care Fundamentals
PTA 2126, Movement Science

**Fall**

PTA 2213, Musculoskeletal PT
PTA 2233, Neuromuscular PT
PTA 2243, Cardiopulmonary PT
PTA 2252, Clinical Education I

**Spring**

PTA 2303, Neuromuscular PT II
PTA 2323, Seminar
PTA 2333, Clinical Education II
PTA 2343, Clinical Education III

**Total 72**

---

*Students should be aware of the Master of Physical Therapy (MPT) Program offered at ASU. See Graduate Bulletin or contact the PT program office for details (870-972-3591).*
The BS in Radiologic Sciences degree is offered in 4 emphasis areas:
1. Imaging Specialist
   which requires two of the following specialties:
   - Cardiovascular Interventional Technology
   - Mammography and Bone Densitometry
   - Computed Tomography
   - Magnetic Resonance Imaging
2. Radiation Therapy
3. Diagnostic Medical Sonography
4. Nuclear Medicine Technology

The BS degree requires the following total credit hours:
- General Education: 46-49
- AAS or equivalent: 47
- Radiologic Sciences Core: 11
- Major/Minor: 26-38
- TOTAL: 130-142

Admission Requirements for AAS Degree in Radiologic Technology Major

The Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology. The program exists to produce competent, entry-level radiographers for the practice of diagnostic imaging. Through didactic courses, laboratory participation, and clinical experiences, students acquire professional, ethical, and technical skills required of radiologic practitioners.

Admittance to the Radiologic Technology Program is accessed through two distinct methods. Students must declare intent to pursue the Associate of Applied Science degree or intent to pursue the Bachelor of Science in Radiologic Sciences. Students who declare the AAS degree and later wish to pursue the BSRS degree must make separate application upon completion of the AAS degree. (See the Health Professions Advisor or the Director of Radiologic Sciences Programs for complete details.)

Students accepted into the Radiologic Technology program will complete their professional education in two areas: the class room and the clinical setting. Class room work will occur on the ASU-Jonesboro campus, while clinical education will occur in area hospitals and clinics. The professional portion of the program is offered as a full-time course. Upon graduation, students are eligible for the national credentialing American Registry of Radiologic Technologists examination in radiography.

Applicants to the Radiologic Technology Program are selected by the Admissions Committee using the following criteria:
(1) Cumulative grade point average
(2) Support course GPA (see application package)
(3) Essay Score
(4) Reference evaluations

Each of the 4 categories listed is translated to a scaled system of points. Once scaled, students are ranked accordingly. The top 60 will be asked for an interview. Note: Students completing support course work on the ASU Jonesboro campus will be awarded 5 points toward the final score.

AAS Degree Radiologic Technology Emphasis

The following course is required prior to or following admission to the professional program:

PHY 2133, Survey of Physics for the Health Professions

The following courses are required following admission to the professional program:

**1st Summer II**
- RT 1103, Introduction to Radiologic Technology
- RT 1112, Basic Radiologic Procedures
- RT 1121, Basic Radiologic Procedures Laboratory

**1st Fall**
- RT 1202, Radiologic Procedures
- RT 1211, Radiologic Procedures Laboratory
- RT 1233, Principles of Exposure I
- RT 1332, Clinical Practicum I

**1st Spring**
- RT 1333, Advanced Radiologic Procedures Laboratory
- RT 2122, Principles of Exposure II
- RT 3133, Clinical Practicum VI
- RT 3212, Principles of Exposure II Laboratory
- RT 1332, Clinical Practicum II

**2nd Summer I**
- RT 2104, Clinical Practicum III

**2nd Summer II**
- RT 2114, Clinical Practicum IV

**2nd Fall**
- RT 2302, Radiologic Specials
- RT 2312, Principles of Exposure
- RT 3223, Clinical Practicum V

**2nd Spring**
- RT 3312, Radiobiology
- RT 3113, Radiologic Pathophysiology
- RT 3332, Clinical Radiologic Pharmacology

The following is a required support course for the degree:

PSY 2013, Introduction to Psychology

Admission Requirements for BSRS Degree Imaging Specialist Emphasis

To be admitted to the Bachelor of Science in Radiologic Sciences program, students must meet one of the requirements listed below:

1. Completion of a Joint Review committee on Education in Radiologic Technology (JRCERT) approved Associate Degree Program in Radiologic Technology OR
2. Receive credit by articulation. Registered radiologic technologists who do not possess an Associate degree may receive 47 radiologic technology credit hours by providing documentation of the following three requirements:
   a. graduation from a JRCERT approved school of Radiologic Technology
   b. a passing score on the American Registry of Radiologic Technologists certification examination
   c. successful academic performance on 6 semester hours of the BSRS Program.

When all three requirements have been met, the Chair of the Department of Radiologic Sciences will formally notify the Office of Admissions and Records and credit will be recorded on the student’s transcript for 47 hours of ASU Radiologic Technology courses.

See the ASU web page (www.astate.edu) for current bulletin information.
Admission Requirements for BSRS Degree Radiation Therapy Emphasis

The Radiation Therapy program is accredited by the Joint Review Committee on Education in Radiologic Technology. This major is designed to provide the student with the skills necessary to become a radiation therapist. To complete the major in this area, students must complete the 41 hours of the program. No minor is required. Upon completion of the baccalaureate degree students are prepared to sit for the ARRT examination in Radiation Therapy. Selection into the program is based on:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Cumulative grade point average</td>
<td></td>
</tr>
<tr>
<td>(2) Selected course grades</td>
<td></td>
</tr>
<tr>
<td>(3) Interview</td>
<td></td>
</tr>
<tr>
<td>(4) Selection preference is given to those who are near successful completion of the General Education Curriculum and the Radiologic Sciences core courses</td>
<td></td>
</tr>
</tbody>
</table>

The above criteria are converted to a point system. ASU graduates receive extra points when calculating total scores.

Admission Requirements for BSRS Degree Diagnostic Medical Sonography Emphasis

The Diagnostic Medical Sonography program is undergoing initial accreditation review by the Joint Review Committee on Education in Diagnostic Medical Sonography. This major is designed to produce competent and compassionate entry-level sonographers for the practice of diagnostic medical sonography. To complete the major in this area, students must complete the 39 hours of the program. No minor is required. Upon completion of the baccalaureate degree students are prepared to sit for the American Registry of Diagnostic Medical Sonographers (ARDMS) examinations in ultrasound physics and instrumentation, abdomen, and obstetrics/gynecology.

Applicants to the Diagnostic Medical Sonography Program are selected by the Admissions Committee using the following criteria:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Cumulative grade point average</td>
<td></td>
</tr>
<tr>
<td>(2) Selected course grades</td>
<td></td>
</tr>
<tr>
<td>(3) Orientation Session for All applicants</td>
<td></td>
</tr>
<tr>
<td>(4) Personal essay completed at time of orientation session</td>
<td></td>
</tr>
<tr>
<td>(5) Selection preference is given to those who are near successful completion of the General Education Curriculum and the Radiologic Sciences core courses</td>
<td></td>
</tr>
</tbody>
</table>

The above criteria are converted to a point system.

Admission Requirements for BSRS Degree Nuclear Medicine Technology Emphasis

The Nuclear Medicine Technology program is a joint accreditation arrangement between ASU and Methodist Healthcare of Memphis and Baptist Healthcare in Little Rock, accredited by the Joint Review Committee on Education in Nuclear Medicine Technology. The program is designed to provide the student with the skills necessary to become a nuclear medicine technologist. To complete the major in this area, students must complete the 31 hours of the program. Didactic (class room) courses will be held in Memphis, while clinical courses will be held in Jonesboro. To be eligible to apply to the Nuclear Medicine Program students must either:

- be a graduate of a JRCERT program in radiologic technology or
- possess another healthcare associate or bachelors degree or
- possess a bachelors degree in a scientific area

Applicants to the Nuclear Medicine Technology Program are selected by the Admissions Committee, composed of faculty from ASU and Methodist Healthcare, using the following criteria:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Cumulative grade point average</td>
<td></td>
</tr>
<tr>
<td>(2) Selected course grade</td>
<td></td>
</tr>
</tbody>
</table>

Credit for Work Experience

Technologists who have successfully passed an appropriate national professional examination and have worked 1,000 hours in that specialty over the past two years are eligible to receive credit for work experience. Individuals should contact their RS adviser for further information.

The specific courses required for each major and minor are:

General Education Requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
**Radiation Therapy Emphasis (41 hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RST 4203</td>
<td>Introduction to Radiation Therapy and Patient Care</td>
<td>3</td>
</tr>
<tr>
<td>RST 4214</td>
<td>Radiation Therapy Principles and Practice I</td>
<td>4</td>
</tr>
<tr>
<td>RST 4313</td>
<td>Radiation Physics I</td>
<td>3</td>
</tr>
<tr>
<td>RST 4513</td>
<td>Radiation Therapy Clinical Education I</td>
<td>3</td>
</tr>
<tr>
<td>NHP 4543</td>
<td>Healthcare Administration or RS 4343, Radiologic Administrative Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RST 4224</td>
<td>Radiation Therapy Principles and Practice II</td>
<td>4</td>
</tr>
<tr>
<td>RST 4333</td>
<td>Applied Radiation Biology</td>
<td>3</td>
</tr>
<tr>
<td>RST 4323</td>
<td>Radiation Physics II</td>
<td>3</td>
</tr>
<tr>
<td>RST 4523</td>
<td>Radiation Therapy Clinical Education II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summer**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RST 4234</td>
<td>Radiation Therapy Principles and Practice III</td>
<td>4</td>
</tr>
<tr>
<td>RST 4413</td>
<td>Radiation Protection, Safety, and Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>RST 4242</td>
<td>Radiation Therapy Clinical Treatment Planning</td>
<td>2</td>
</tr>
<tr>
<td>RST 4533</td>
<td>Radiation Therapy Clinical Education III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Diagnostic Medical Sonography Emphasis (37 hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSU 4102</td>
<td>Introduction to Ultrasound</td>
<td>2</td>
</tr>
<tr>
<td>RSU 4313</td>
<td>Ultrasound Physics and Instrumentation I</td>
<td>3</td>
</tr>
<tr>
<td>RSU 4513</td>
<td>Abdominal Sonography I</td>
<td>3</td>
</tr>
<tr>
<td>RSU 4521</td>
<td>Abdominal Sonography Lab</td>
<td>1</td>
</tr>
<tr>
<td>RSU 4513</td>
<td>Ultrasound Clinical Education I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP 3003</td>
<td>General Gross Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>RSU 4411</td>
<td>Ultrasound Image Analysis I</td>
<td>1</td>
</tr>
<tr>
<td>RSU 4533</td>
<td>Ultrasound Clinical Education III</td>
<td>3</td>
</tr>
<tr>
<td>RSU 4513</td>
<td>Ob-Gyn Sonography</td>
<td>3</td>
</tr>
<tr>
<td>RSU 4621</td>
<td>Ob-Gyn Sonography Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

**2nd Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSU 4522</td>
<td>Ultrasound Physics and Instrumentation II</td>
<td>2</td>
</tr>
<tr>
<td>RSU 4533</td>
<td>Abdominal Sonography II</td>
<td>3</td>
</tr>
<tr>
<td>RSU 4541</td>
<td>Abdominal Sonography Lab</td>
<td>1</td>
</tr>
<tr>
<td>RSU 4421</td>
<td>Ultrasound Image Analysis II</td>
<td>1</td>
</tr>
<tr>
<td>RSU 4542</td>
<td>Ultrasound Clinical Education IV</td>
<td>2</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSU 4552</td>
<td>Ultrasound Clinical Education V</td>
<td>2</td>
</tr>
</tbody>
</table>

**Nuclear Medicine Technology Emphasis (46 hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS 3122</td>
<td>Legal and Regulatory Environment of Radiology</td>
<td>2</td>
</tr>
<tr>
<td>RS 3811</td>
<td>Radiologic Quality Management Administration</td>
<td>1</td>
</tr>
<tr>
<td>RS 4862</td>
<td>Advanced Radiologic Pathophysiology II</td>
<td>2</td>
</tr>
</tbody>
</table>

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS 4313</td>
<td>Nuclear Medicine Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>RS 4323</td>
<td>Nuclear Medicine and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>RS 4523</td>
<td>Nuclear Medicine Clinical Education I</td>
<td>3</td>
</tr>
<tr>
<td>RS 4343</td>
<td>Radiologic Administrative Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS 4323</td>
<td>Nuclear Medicine Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>RS 4113</td>
<td>Nuclear Medicine Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>RS 4523</td>
<td>Nuclear Medicine Clinical Education II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summer**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS 4535</td>
<td>Nuclear Medicine Clinical Education III</td>
<td>5</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN APPLIED SCIENCE IN NURSING:**

The purpose of the associate level is to prepare graduates who apply the nursing process in the provision of direct nursing care for clients with common, well-defined problems. Therefore, the associate curriculum is grounded in the liberal arts and includes professional values, core competencies, core knowledge and role development. The associate degree graduate is prepared to function as a member of the profession and a manager of care in acute and community based settings.

**BACHELOR OF SCIENCE IN NURSING:**

The nurse prepared at the baccalaureate level is a professional who has acquired a well-delineated and broad knowledge base for practice. We believe that the role of a baccalaureate graduate is multifaceted and developed through extensive study in the areas of liberal education, professional values, core competencies, core knowledge and role development. This knowledge base prepares the beginning baccalaureate graduate to function as a provider of direct and indirect care to individuals, families, groups, communities and populations. The baccalaureate graduate is also a member of the profession and a designer, manager and coordinator of care.

**EDUCATIONAL MOBILITY:**

The nursing faculty is committed to the concept of educational mobility, and has provided a variety of approaches to Licensed Practical Nurses, to Licensed Psychiatric Technician Nurses, and to Registered Nurses prepared at the associate degree and diploma levels. LPNs, LPNTs, and RNs must work closely with their advisers. LPNs and LPNTs must be admitted to the desired program prior to enrolling in any nursing courses (except NRS 2203, NRS 3353, NRS 3392, and NRSP 3391). The BSN program has a specially designed RN track to facilitate RNs’ movement through the BSN. The track includes a reduction in nursing clinical hours, and clinical experiences designed to accommodate individual learning goals. RNs must make application to the BSN program during the semester enrolled in NRS 3312. Detailed information may be obtained from the nursing office (972-3074) relative to earning credit by articulation or examinations.

Prospective students who are LPNs, LPNTs, or RNs applying for admission to any nursing program must have a current license in good standing with the Arkansas Board of Nursing.

**DISTANCE LEARNING PROGRAM:** The Department of Nursing offers the Associate in Applied Science in Nursing and Bachelor of Science in Nursing degrees at the undergraduate level. Completion of either program qualifies students to take the NCLEX-RN examination for licensure as a registered nurse.

**Department of Nursing**

Professor Elizabeth Stokes, Interim Chair; Professors Skorga, Young; Associate Professors Arangie; Assistant Professors Baker, Blue, Campbell, Drake (Ozarka), Gilbert-Palmer, Hall, Huskey, Isaacs, McDougall, McLerry (ASU-Mountain Home), E. Miller (ASU-Beebe), R. Miller, Nix, Owens, Perelit, Priemer, Siford, Smith (ASU-Beebe), Stacy, Troxel, Walden, Wiggins, Wike (Mountain Home), White, Wimberley

The primary mission of the Department of Nursing is to prepare students for beginning and advanced practice as registered nurses. Arkansas State University nursing programs are committed to quality education and to meeting the unique needs of northern and eastern Arkansas and the surrounding area. Research and scholarly activities within the department contribute to nursing theory, practice, and education. Service activities focus on leadership and consultation in a variety of health related areas.

The Department of Nursing offers the Associate in Applied Science in Nursing and Bachelor of Science in Nursing degrees at the undergraduate level. Completion of either program qualifies students to take the NCLEX-RN examination for licensure as a registered nurse.
### Major in Nursing

**Associate in Applied Science in Nursing**

**Mountain Home Campus**

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1003 and 1013, Freshman English I and II</td>
<td>6</td>
</tr>
<tr>
<td>HIS 2781 or 2773, U.S. History To or Since 1876</td>
<td>3</td>
</tr>
<tr>
<td>OR POSC 2103, Introduction to United States Government</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1013, College Mathematics or MATH 2023, College Algebra (or higher level math course)</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2003 and 2001, Human Anatomy and Physiology I and Laboratory for Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>CS 1043, Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>OR MIS 1503, Microcomputer Applications</td>
<td>3</td>
</tr>
<tr>
<td>any comparable three-hour computer course</td>
<td>3</td>
</tr>
</tbody>
</table>

---

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRS 1214, Introduction to Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NRS 1222, Foundations of Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td>NRS 1225, Nursing Agency I</td>
<td>5</td>
</tr>
<tr>
<td>NRS 1225, Role Development I</td>
<td>2</td>
</tr>
<tr>
<td>NRS 1249, Clinical Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>NRS 2215, Nursing Agency II</td>
<td>5</td>
</tr>
<tr>
<td>NRS 2225, Role Development II</td>
<td>2</td>
</tr>
<tr>
<td>NRS 2225, Clinical Practicum II</td>
<td>2</td>
</tr>
<tr>
<td>NRS 2236, Nursing Agency III</td>
<td>5</td>
</tr>
<tr>
<td>NRS 2262, Role Development III</td>
<td>2</td>
</tr>
<tr>
<td>NRS 2254, Clinical Practicum III</td>
<td>4</td>
</tr>
<tr>
<td>NRS 2272, Role Development Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NRS 3392, Health Assessment Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NRS 3391, Health Assessment Practicum</td>
<td>1</td>
</tr>
</tbody>
</table>

---

**Required Support Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2103 and 2101, Microbiology and Laboratory for Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PSY 2013, Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 2013 and 2011, Human Anatomy and Physiology I and Laboratory for Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
</tbody>
</table>

---

**Total**

* 19

### Nursing Associate in Applied Science in Nursing

**Mountain Home Campus**

A. The following thirteen hours must be completed prior to application for the program:

- ZOOL 2003, Human Anatomy and Physiology I
- ZOOL 2001, Human Anatomy and Physiology Laboratory I
- ENG 1003, Freshman English I (must have a "C" or better)
- PSY 2013, Introduction to Psychology
- MATH 1023, College Algebra (or higher level math)

Completion of all lab science and mathematics courses required for an Associate in Applied Science in Nursing degree with a minimum grade of "C" in each course.

B. The following courses must be satisfied prior to taking Microbiology:

- NRS 2236, Nursing Agency III and NRS 2244, Clinical Practicum III
- ENG 1013, Freshman English II (must have a "C" or better)
- CGPA of 2.00 is required in science courses.

C. The following must be completed prior to graduation:

- HIS 2781 or HIS 2773, U.S. History To or since 1876, or
- POSC 2103, Introduction to United States Government

D. A minimum grade of "C" is required in all nursing courses for progression.

Following is one suggested sequence which may be taken after completion of prerequisites and admission to the program. Students should consult with their advisor for a plan that best meets individual needs.

### Freshman Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sophomore Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Associate in Applied Science in Nursing

ASU participates in the statewide articulation program for licensed practical nurses (LPNs) seeking the AASN degree.

### LPN - AASN Program

**Jonesboro, Beebe and Ozarka**

Applicants who completed their LPN/LPTN programs greater than 12 months prior to applying to the AASN program must provide proof of work experience. For specific information concerning the LPN to RN program, contact the Department of Nursing Office at (870) 972-3074.

A. The following courses must be completed prior to fall nursing course work:

- MATH 1023, College Algebra (or higher level math course)
- ENG 1003, Freshman English I (grade of "C" or better)
- ZOOL 2003/2001, Anatomy and Physiology I with Lab
- ZOOL 2013/2011, Anatomy and Physiology II with Lab
- PSY 2013, Introduction to Psychology
- MATH 1023, College Algebra (or higher level math course)
- CIS 1043, Introduction to Computers
- NRS 3392, Health Assessment Practicum

Completion of all lab science and mathematics courses required for an Associate in Applied Science in Nursing degree with a minimum grade of "C" in each course.

---

See the ASU web page (www.astate.edu) for current bulletin information.
Recommended General Education Credits .......................................................................................................... 21

NRS Elective (upper level course)........................................................................................................................ 3

NRSP 3391, Health Assessment Practicum......................................................................................................... 1

NRS 3392, Health Assessment............................................................................................................................. 2

NRS 4355, Critical Care and Emergency Nursing................................................................................................ 5

NRS 4343, Professional Nursing—Community .................................................................................................... 3

BIOL 2101, Lab for Micro Biol for Nurs & Allied Hth 1

BIOL 2103, Micro Biology Laboratory .............................................................................................................. 1

BIOL 2103, Micro Biology Laboratory .............................................................................................................. 1

CHEM 1031, Laboratory for Introduction to Organic and Biochemistry ............................................................ 3

ZOOL 2013, Wld Civ Sn 1660 ................................ 3

PSY 2013, Principles of Psychology ................................................................................................................... 3

POSC 2103, Introduction to United States Government ...................................................................................... 3

Total 136

Suggested Sequence for Completion of Program

Following admission to the LPN-to-RN Program, a suggested sequence for the completion year is as follows:

**Fall**

NRS 1235, Nursing Agency I ........................................ 5

NRS 1244, Clinical Practice I ........................................ 4

NRS 2262, Role Development I .................................... 2

NRS 2272, Role Development Practicum .................... 2

HIST 1023, World Civilizations I ................................. 3

**Spring**

NRS 2215, Nursing Agency II ....................................... 5

NRS 2224, Clinical Practice II ...................................... 4

NRS 2252, Role Development II .................................. 2

ENG 1013, Composition II .......................................... 3

Total 10

Major in Nursing

Bachelor of Science in Nursing

General Education Requirements: Sem. Hrs.

See General Education Curriculum for baccalaureate degrees, pages 78 and 79 ........................................ 46-49

Specific General Education Requirements:

Students with this major must take the following:

- MATH 1023, College Algebra
- CHEM 1013, General Chemistry I
- PSY 2013, Introduction to Psychology
- SOC 2213, Principles of Sociology
- BIOL 2103, Microbiology and BIOL 2101, Laboratory Microbiology

Major Requirements:

Sem. Hrs.

NRS 2014, Concepts in Nursing ................................... 4

NRS 2042, Foundations of Nursing Practice ............... 2

NRS 2034, Health Promotion and Introduction to Acute Care Nursing ......................................................... 2

NRS 2234, Nursing Care Systems II .......................... 4

NRS 3302, Health Assessment .................................... 2

NRS 3391, Health Assessment Practicum ........................ 1

NRS 3816, Acute Care Nursing I ................................ 5

NRS 3325, Nursing Care Systems III ......................... 3

NRS 3343, Clinical Pharmacology and Nursing Management ................................................................. 3

NRS 3045, Acute Care Nursing II .............................. 3

NRS 3355, Nursing Care Systems IV ........................... 3

NRS 3312, Introduction to Nursing Research .......... 3

NRS 3412, Chronic Illness and Rehabilitation Nursing ................................................................. 2

NRS 4336, Nursing Care Systems V ......................... 2

NRS 3434, Professional Nursing—Community .......... 3

NRS 4365, Critical Care and Emergency Nursing ...... 5

NRS 4362, Professional Role Development ................... 2

NRS 4386, Nursing Care Systems VI .......................... 5

NRS 4543, Health Care Administration ....................... 3

NRS Elective (upper level course) .................................. 3

BIOL 3103, AND 2101, Microbiology and Laboratory for Microbiology ......................................................... 4

CHEM 1031, Introduction to Organic and Biochemistry .................................................................................. 3

PSY 3103 and 3101, Quantitative Methods for Behavioral Sciences and Quantitative Methods Laboratory, OR SOC 3383 and 3381, Social Statistical Methods and Laboratory for Social Statistical Methods ................................................................................................................. 4

ZOOL 2003, Human Anatomy and Physiology I ........................................................... 4

ZOOL 2001, Laboratory for Human Anatomy and Physiology I ............................... 4

ZOOL 3143, Pathophysiology or NRS 3023, Interdisciplinary Clinical Pathology ........................................... 3

Recommended General Education Credits .................................................. 21

Total 62

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
### Bachelor of Social Work (BSW)

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 4833, Psychology of the Abnormal</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3363, Minority Groups</td>
<td>3</td>
</tr>
<tr>
<td>SOC 3381, Social Statistical Methods Lab</td>
<td>1</td>
</tr>
<tr>
<td>SOC 3380, Social Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>SOC 4299, Methods of Social Research</td>
<td>3</td>
</tr>
<tr>
<td>SW 2203, Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SW 2223, Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SW 2353, Social Work Practice I</td>
<td>3</td>
</tr>
<tr>
<td>SW 3303, Human Behavior in Social Environment I</td>
<td>3</td>
</tr>
<tr>
<td>SW 3333, Human Behavior in Social Environment II</td>
<td>3</td>
</tr>
<tr>
<td>SW 4263, Social Work Practice II</td>
<td>3</td>
</tr>
<tr>
<td>SW 4273, Field Experience I</td>
<td>3</td>
</tr>
<tr>
<td>SW 4283, Field Experience Seminar</td>
<td>3</td>
</tr>
<tr>
<td>SW 4296, Field Experience II</td>
<td>6</td>
</tr>
<tr>
<td>SW 4300, Social Work Practice III</td>
<td>3</td>
</tr>
<tr>
<td>SW 4313, Social Welfare Policy</td>
<td>3</td>
</tr>
<tr>
<td>*Approved Electives:</td>
<td>49</td>
</tr>
</tbody>
</table>

*Students must have 12 hours of approved upper division electives. Foreign language, specifically Spanish, is highly recommended. Students choosing language must complete all 12 hours in the sequence.*

### Admission and Retention

All candidates for the Bachelor of Social Work must obtain official admission to the social work program. Details of application are found in the Social Work Handbook. Students who make formal application must meet the following criteria:

1. Complete a minimum of 45 semester hours.
2. Achieve and maintain a minimum GPA of 2.5 overall and a 2.5 in major.
3. Complete the following courses with a grade of "C" or better in each:
   - ENG 1003, ENG 1013, and SW 2203.
4. Make formal application to the program.
5. Appear for an interview by a SW faculty member.
6. Must meet the criteria listed in the handbook and be approved by the Program Screening Committee.

### COLLEGE OF NURSING AND HEALTH PROFESSIONS COURSE DESCRIPTIONS

### DEPARTMENT OF HEALTH PROFESSIONS

**Health Professions (HP) (Special course fees may apply.)**

1. **1002. Freshman Seminar: Introduction to Health Sciences**
   - Designed to help the first-year student adjust to the university, explore the purposes of higher education and the potential roles of students within the university. It will provide an introduction to the nature of university education, a general orientation to the functions and resources of the university, and a survey of career opportunities in the health sciences. (F)

2. **2013. Medical Terminology**
   - Basic language related to medical science and the health professions: word analysis, construction, spelling, definitions. (F, S)

3. **3003. General Gross Anatomy**
   - The regional topographic study of human gross anatomy using lecture, laboratory, discussion, and prospected cadavers. Emphasis is placed on surface anatomy, musculoskeletal and neuromuscular systems. Clinical correlations are highlighted. Lecture 2 hours per week. Laboratory 2 hours per week. Prerequisites: ZOOL 2011, ZOO 2013. Enrollment will be limited. Enrollment preference will be given to students in the Sports Medicine / Athletic Training Program. Additional enrollment will be at the discretion of the instructor.

4. **4133. Performance Enhancement and Metabolism for Sport and Exercise**
   - Provides learners with a basic and applied scientific knowledge base that can be used to enhance human performance, to protect the health and safety of active individuals, and to be a critical consumer. (S)

---

See the ASU web page (www.astate.edu) for current bulletin information.
Clinical Laboratory Science (CLS)

1511. Laboratory for Principles of Clinical Laboratory Science Development of laboratory skills techniques which are applicable in all clinical laboratory areas. Corequisite: CLS 1512. (F, S)

1512. Principles of Clinical Laboratory Science Introduction to concepts utilized throughout all the clinical laboratory areas. Corequisite: CLS 1511. (F, S)

1521. Urine and Body Fluid Analysis Theory and analysis of urine and body fluids (excluding blood) in normal and pathological states. Techniques of analysis include physical, chemical, and microscopic procedures. Corequisite: CLS 1531. (S)

1531. Laboratory for Urine and Body Fluid Analysis Performance of body fluid testing procedures necessary to function in a clinical body fluid laboratory. Corequisite: CLS 1521. (S)

2511. Laboratory for Medical Parasitology Performance of laboratory procedures necessary to function in a clinical parasitology laboratory. Corequisite: CLS 2512. (SU)

2512. Medical Parasitology Discussion of the laboratory diagnosis of parasites responsible for human infection. Includes the recovery and identification of parasites from patient specimens. Corequisite: CLS 2511. (SU)

2521. Laboratory for Hematology I Performance of laboratory procedures necessary to function in a clinical hematology laboratory. Prerequisites: CLS 1512 and CLS 1511 or permission of the instructor. Corequisite: CLS 2523. (F)

2522. Hematology I Discussion of the formation, morphology, and function of various blood cells and the principles of hemostasis. Includes the theoretical elements of related laboratory procedures. Prerequisites: CLS 1512 and CLS 1511 or permission of the instructor. Corequisite: CLS 2521. (F)

2514. Clinical Practicum I Allows students to become proficient in the areas of chemistry, utilizing the highly sophisticated equipment located in this discipline. Students will become members of the health care team under the direction of the clinical staff. Prerequisites: CLS 1511, CLS 1512, CLS 2541, 2543; CHEM 1011, CHEM 1013. (F, S, SU)

2524. Clinical Practicum II Allows the students to become proficient in the areas of hematology and urinalysis, utilizing the highly sophisticated equipment located in these disciplines. Students will become members of the health care team under the direction of the clinical staff. Prerequisites: CLS 1511, CLS 1512, CLS 1521, 1531, 2521, 2523. (F, S, SU)

2531. Laboratory for Medical Microbiology I Performance of laboratory procedures necessary to function in the microbiology section of a clinical laboratory. Prerequisite: BIOL 2101, BIOL 2103. Corequisite: CLS 2533. (F)

2533. Medical Microbiology I Study of pathology, biochemistry, and identification of organisms causing infectious diseases in humans. Includes collection and processing of specimens. Pre-requisite: BIOL 2103 and 2101. Corequisite: CLS 2531. (F)

2541. Laboratory for Clinical Chemistry I Laboratory methods and techniques for the analysis of body fluids including routine assessment of body metabolism, renal function, liver function, electrolytes and acid/base balance, enzymes, and other analytes. Corequisite: CLS 2543. Pre- or corequisite: CLS 1511, CLS 1512, CHEM 1013, CHEM 1011. (S)

2543. Clinical Chemistry I Analysis of body fluids with correlation to both health and disease. Theoretical concepts include testing for body metabolism, renal function, liver function, electrolytes and acid/base balance, enzymes, and other routine assessment. Corequisite: CLS 2541. Pre- or corequisite: CLS 1511, CLS 1512, CHEM 1013, CHEM 1011. (S)

2551. Hematology Disorders for the Clinical Laboratory Technician Discussion of the basic principles of hematologic disorders, causes, laboratory results, and treatment. Prerequisites: CLS 2523 and CLS 2521. (S)

2561. Laboratory for Immunohematology I Performance of procedures necessary to function in a clinical blood bank. Prerequisites: CLS 2523, 2521, 2573, 2571, ZOOL 2013 and 2011. Corequisites: CLS 2563. (S)

2563. Immunohematology I Discussion of the principles involved in compatibility testing, antigen and antibody identification, donor blood acquisition and preparation, and a basic discussion of relevant diseases. Prerequisites: CLS 2523, 2521, 2573, 2571, ZOOL 2013 and 2011. Corequisite: CLS 2561. (S)

2571. Laboratory for Clinical Immunology and Serology Performance of laboratory procedures necessary to function in the serology section of a clinical laboratory. Prerequisites, ZOOL 2001, ZOOL 2003; Corequisite: CLS 2573. (F)

2573. Clinical Immunology and Serology Immunity in health and disease will be discussed. Provides theoretical basis of serological diagnostic procedures including techniques of test performance. Prerequisites, ZOOL 2001, ZOOL 2003; Corequisite: CLS 2571. (F)

3153. Clinical Biochemistry A study of the biochemical principles that make up the chemical and molecular aspects of the clinical chemistry laboratory. Case studies will apply biochemical principles involved in day-to-day practices and how they work in disease processes. Prerequisite: CHEM 3103 and CHEM 3101. (S)

3221. Laboratory for Hematology II Performance of advanced laboratory procedures, recognition of cells and lab values related to hematology disorders, development of cases related to specified hematology disorders. Prerequisites: CLS 2523 and CLS 2521. Corequisite: CLS 3223. (F)

3223. Hematology II In-depth discussion of hemocrit disorders, causes, laboratory results, and treatment. Prerequisites: CLS 2521 and CLS 2523. Corequisite: CLS 3221. (F)

3343. Principles of Diseases for the Clinical Laboratory Sciences Introduction to disease processes in the major systems of the body, with practical applications for clinical laboratory personnel. Prerequisite: Junior standing in CLS-BS Program. (F)

3514. Clinical Practicum III Enhances learning experiences in microbiology and parasitology. Students will become members of the health care team under the direction of the clinical staff. Prerequisites: CLS 2511, 2512, 2531, 2533. (F, S, SU)

3524. Clinical Practicum IV Enhances the learning experiences in serology and blood bank techniques. Students will become members of the health care team under the direction of the clinical staff. Prerequisites: CLS 2561, 2563, 2571, 2573. (F, S, SU)

3522. Clinical Laboratory Management Introduction to supervisory aspects of fiscal management, law, quality assurance, planning, organization, and communications as applicable to clinical laboratory medicine. Prerequisites: Permission of the CLS program director. Admission to CLS-BS Program; Junior standing and completion of CLS 4174, CLS 4184, CLS 4194, and CLS 4204. (F)

4101-2-3. Special Problems in Clinical Laboratory Science Specific area with the topic and mode of inquiry agreed upon by the student and instructor. Registration must be approved by the program director. (F, S)

4111. Laboratory for Clinical Chemistry II Complex analysis of body fluids with correlation to both health and disease. Theoretical concepts include testing for body metabolism, renal function, liver function, electrolytes, and acid/base balance, enzymes, and other routine assessments. Prerequisites: CHEM 1013, 1011; CLS 2543, 2541. Corequisite: CLS 4113. (F)
4113. Clinical Chemistry II Complex analysis of body fluids with correlation to both health and disease. Theoretical concepts include advanced testing for body metabolism, renal function, liver function, electrolytes and acid/base balance, enzymes, endocrinology and therapeutic drug monitoring. Prerequisites: CHEM 1013, CHEM 1011; CLS 2543, CLS 2541. Corequisite: CLS 4111. (F)

4174. Clinical Practicum I Clinical laboratory experience in chemistry and special chemistry. Prerequisite: admission to clinical program. (F, S, SU)

4184. Clinical Practicum II Clinical laboratory experience in hematology and coagulation and urinalysis. Prerequisite: admission to clinical program. (F, S, SU)

4194. Clinical Practicum III Clinical laboratory experience in microbiology and parasitology. Prerequisite: admission to clinical program. (F, S, SU)

4204. Clinical Practicum IV Clinical laboratory experience in immunohematology and serology. Prerequisite: admission to clinical program. (F, S, SU)

4211. Clinical Laboratory Educational Roles This course prepares the student for the educational roles that will be assumed in the clinical laboratory or other settings. Prerequisite: Senior standing in the BS CLS Program. (S)

4214. Clinical Practicum V Clinical laboratory experience in management and clinical electives. Prerequisite: Admission to the clinical program and completion of CLS 4174, 4184, 4204. (F, S, SU)

4331. Laboratory for Immunohematology II Performance procedures necessary to solve intermediate to advanced problems in a clinical blood bank. Prerequisites: CLS 2523, 2521, 2561, 2563. Corequisite: CLS 4333. (S)

4333. Immunohematology II Discussion of advanced theory related to all facets of blood banking. Emphasis on interpreting cases and identifying appropriate problem solving protocols. Prerequisites: CLS 2523, 2521, 2561, 2563. Corequisite: CLS 4331. (S)

4441. Laboratory for Medical Microbiology II Performance of complex laboratory procedures in the clinical microbiology laboratory. Prerequisites: CLS 2533 and CLS 2531. Corequisite: CLS 4443. (S)

4443. Medical Microbiology II Discussion of mechanisms of pathogenicity, quality management, nosocomial infections, specimen collection and processing, automation and instrumentation, molecular techniques, and medical microbiology in patient care. Covers the theoretical elements of related laboratory procedures. Prerequisites: CLS 2533 and CLS 2531. Corequisite: CLS 4441. (S)

Communication Disorders (CD)

1103. Voice and Articulation Improvement Designed to aid students experiencing difficulty with oral communication because of one or more of the following reasons: missing final consonants; misarticulation; mispronunciations; improper grammar; monotone speech; harsh, nasal, or breathy voice; not using pitch inflections to carry meaning, and speaking too fast. (D)

2104. Anatomy and Physiology of Communication An introductory study of the nervous system and a detailed study of normal anatomy and physiology related to speech, swallowing, and language. The course includes lecture and lab components. Prerequisites: None. Recommend ZOOL 2003/1 Human Anatomy and Physiology I and Lab prior to CD 2104 Anatomy and Physiology of Communication. (F, S)

2203. Phonetics Emphasis given to analysis of the formation and production of spoken English. Training in the use of the International Phonetic Alphabet. (F, S)

2653. Introduction to Communication Disorders A survey of the profession of speech pathology and audiology. Includes introduction to language disorders, misarticulations, stuttering, and hearing disorders. 10 hours of clinical observation required. (F, S)

3003. Speech and Hearing Science This course is a study of topics underlying the human communication process and its physiological measurement including production, transmission, reception and perception. Prerequisite: CD 2103. (D)

3303. Normal Language Development Normal development of the oral communication process emphasizing phonological and syntactical development of children. (F, SU)

3402. Introduction to Manual Communication An introductory course in American Sign Language and Signing Exact English. Emphasis on acquisition of vocabulary and development of receptive language skills. (F, S)

3503. Audiology A consideration of the causes of hearing loss, with practical experiences in diagnostic audiometric procedures. Identification of hearing problems, methods of speech and language training, and methods of teaching speech reading discussed and demonstrated. (F)

3803. Service Delivery in Communication Disorders* An introduction to speech-language programs, their organization and administration. Fifteen hours of clinical observation required. (F, S)

4093. Neurological Bases of Human Communication* A study of the structure and function of the nervous system as related to normal communication. (F)

4103. Fluency Disorders* A study of speech as a time-related adaptive behavior. Discussion of various types of fluency disorders, their identification, assessment and intervention. (F)

4254. Introduction to Neurogenic Disorders* A survey of speech, cognitive-linguistic, and swallowing disorders following neurologic insult. The course will include assessment and general intervention strategies. Prerequisite: CD 4093 or permission of instructor. (S)

4303. Language Intervention for Individuals with Mild Disabilities* Assessment procedures for evaluating language disorders and language intervention procedures for individuals with mild disabilities. Prerequisite: CD 3303 or permission of instructor. (F, S)

4403. Aural Rehabilitation Method of instruction in auditory training, speech reading, and hearing aid orientation. Prerequisite: CD 3303 or permission of instructor. (S)

4451. Introduction to Clinical Practice* Management of articulatory and/or language-impaired client to include assessment, IEP and lesson plan development, and intervention. Prerequisites: CD 3703, 3803, and 4303. (F, S)

4502. Advanced Manual Communication An advanced course designed to continue development of basic language skills in American Sign Language and Signing Exact English. Prerequisite: Permission of instructor. (D)

4553. Craniofacial Anomalies and Communication Disorders* A study of the speech, language, hearing, and swallowing disorders associated with cleft palate and other craniofacial syndromes. Prerequisites: Admission to the UG Program in Communication Disorders. (F)
4703. Articulation and Phonological Disorders* Characteristics of articulatory and phonologic disorders. Assessment and intervention of articulatory and phonologic disorders. Prerequisite: CD 2203. (F, S)

4751. Clinical Practice I* Direct clinical practice stresses assessment, report writing, development of treatment plans, session plans, and progress reports. All students must complete this clinical practice course at the ASU Speech and Hearing Center. Each semester hour accounts for a minimum of 50 clock hours of clinical practice. Prerequisites: CD 3803, CD 4303 and CD 4703. (F, S)

4755. Practicum in Communication Disorders* (10 hours credit) Clinical experience with clients with speech, language, and acoustical disabilities. (must meet requirements for student teaching) (F, S)

4801-3. Special Topics Workshop A specially designed series of learning experiences to enhance the professional capabilities of speech pathologists. Opportunity for participants to engage in meaningful learning activities and interact with recognized professionals in the field. Course may be repeated for credit. (D)

4891-3. Independent Study in Communication Disorders Student may engage in studying specific problems in Communicative Disorders. May not be repeated. Prerequisites: Senior standing and approval from professor and department chair. (D)

*Prerequisite: Admission into the Communication Disorders Program

Physical Therapy (PT)

2022. Introduction to Physical Therapy Introduces students to the multifaceted role of physical therapy personnel. Topics include the evolution of medicine and physical therapy, the health care system in the USA, objectives and applications of physical therapy, methodologies used in physical therapy education, the concept of the health care team, and ethics. Competency in medical terminology is evaluated. (F, S)

4001-2-3. Independent Study in Physical Therapy Guided investigation of a topic related to physical therapy selected in consultation with a member of the Physical Therapy faculty. May be repeated for different topics for a total of 6 semester credits. Prerequisite: Approval of the Program Director.

4103. Research Methods in Physical Therapy An introduction to the processes involved in research related to the field of physical therapy. Special emphasis is placed on the application of concepts of measurement, the design of research techniques and methods, for the preparation of the research proposal. Methods of data analysis will also be discussed. Prerequisite: STAT 3233. (F, S)

Physical Therapist Assistant (PTA)

2116. Patient Care Fundamentals Introduction to fundamentals of physical therapy patient care (SU)

2126. Movement Science Introduction to basic principles of musculoskeletal examination and evaluation of the human body. Students learn components of a patient history, systems review, observation and physical examination. Goniometry, muscle testing, sensory and reflex testing, functional assessment, special tests, palpation, posture analysis and gait analysis are covered. (SU)

2213. Musculoskeletal PT Students review passive, active and active assistive range of motion skills. Resistance exercise and the use of exercise equipment are practiced. Stretching and joint mobilization for specific diagnoses that are appropriate for the PTA to perform are practiced. (F)

Nuclear Medicine (RSN)

4113. Nuclear Medicine Pharmacy This course focuses on the study of the chemical and biological aspects of radiopharmaceuticals, radionuclides, radioactive decay, and the preparation and quality control of radiopharmaceuticals. Clinical procedure information for magnetic resonance imaging studies. Prerequisites: Admission to the Nuclear Medicine Program. (S)

4213. Nuclear Medicine Physics and Instrumentation This course focuses on the study of nuclear medicine physics, especially radionuclide production and detection, counting statistics, energy spectrum analysis, and scintillation imaging systems. Prerequisites: Admission to the Nuclear Medicine Program. (F)

4313. Nuclear Medicine Procedures I This course focuses on the study of nuclear medicine clinical procedures for in-vivo and in-vitro studies, related anatomic studies, and associated physiologic pathologic conditions. Prerequisites: Admission to the Nuclear Medicine Program, Co-requisites: RSN 4213 and RSN 4513. (F)

4223. Physical Agents and Massage Basic principles and techniques of massage and application of modalities are presented. An investigation into the risk factors and pathophysiological considerations associated with integumentary diseases and conditions as well as aseptic technique and universal precautions is provided. (F)

4233. Neuromuscular PT I Covers foundational science and theory behind the physical therapy management of patients with neuromuscular conditions. (F)

4243. Cardiopulmonary PT Review of cardiopulmonary anatomy and physiology. Covers physical therapy assessment and rehabilitation of patients with cardiopulmonary disorders frequently seen by physical therapy in the clinical setting. (F)

4252. Clinical Education I Four weeks of full-time affiliation at one facility working under the supervision of an on-site clinical instructor. Students integrate knowledge of basic sciences and interventions to practice treatment techniques in the clinical setting. 40 hours per week. Prerequisite: instructor approval. (F)

4263. Adult Neuromuscular PT II Covers common interventions used in the physical therapy management of patients with neuromuscular conditions. (S)

2323. Seminar Introduction to principles of administration, teaching/learning, and evidence-based practice as they apply to physical therapy practice. Social responsibility, career development and lifelong learning are also discussed. (S)

2333. Clinical Education II Six weeks of full-time affiliation at one facility working under the supervision of an on-site clinical instructor. Students integrate knowledge of basic sciences and interventions to practice treatment techniques in the clinical setting. 40 hours per week. Prerequisite: PTA 2252 and instructor approval. (S)

2343. Clinical Education III Six weeks of full-time affiliation at one facility working under the supervision of an on-site clinical instructor. Students integrate knowledge of basic sciences and interventions to practice treatment techniques in the clinical setting. 40 hours per week. Prerequisite: PTA 2333 and instructor approval. (S)

2413. Directed Study Guided investigation of a topic related to physical therapy selected in consultation with a member of the Physical Therapist Assistant faculty. Prerequisite: Approval of the Program Coordinator. (D)

See the ASU web page (www.astate.edu) for current bulletin information.
4323. Nuclear Medicine Procedures II This course focuses on the continued study of nuclear medicine-clinical procedures for in-vivo and in-vitro studies, related anatomic studies, and associated physiologic pathologic conditions. Prerequisite: RSN 4313. Corequisite: RT 4523. (S)

4513. Nuclear Medicine Clinical Education I The course will provide beginning level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in nuclear medicine procedures. Prerequisites: Good standing in the Nuclear Medicine program. (F)

4523. Nuclear Medicine Clinical Education II The course will provide intermediate level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in nuclear medicine procedures. Prerequisites: Good standing in the Nuclear Medicine program. (S)

4535. Nuclear Medicine Clinical Education III The course will provide advanced level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in nuclear medicine procedures. Prerequisites: Good standing in Nuclear Medicine program. (SU)

Radiologic Technology (RT)

1012. Clinical Relevancy in Radiography A special interest course for those who are planning to sit for the national registry examination for radiography. The course will cover radiographic anatomy, positioning, terminology, exposure, physics, equipment operation and maintenance, processing, and image evaluation. (SU)

1103. Introduction to Radiologic Technology Basic principles associated with the practice of radiologic technology. Includes professionalism, ethical responsibilities, foundations of imaging, radiation protection and patient care procedures. (SU)


1121. Laboratory for Basic Radiologic Procedures The laboratory associated with Basic Radiologic Procedures. Corequisite: RT 1112. (SU)

1202. Radiologic Procedures Radiographic anatomy and positioning of the upper extremity, shoulder girdle, lower extremity and pelvic girdle. Includes positioning nomenclature, pathology and film evaluation. Prerequisite: RT 1112 and 1121. (F)

1211. Laboratory for Radiologic Procedures The laboratory associated with Radiologic Procedures. Corequisite: RT 1102. (F)

1232. Clinical Practicum I Supervised clinical experience in routine radiographic procedures. Students are evaluated with a competency-based evaluation system. Prerequisite or corequisite: RT 1112, 1203, 1211, and 2153. (F)

1303. Advanced Radiologic Procedures Radiographic anatomy and positioning of the vertebral column, bony thorax, skull, facial bones, and sinuses. Includes positioning nomenclature, pathology, and film evaluation. Prerequisite: PHYS 2133, RT 1203, 1211, 1232 and ZOOL 1013 and 1011. (S)

1311. Laboratory for Advanced Radiologic Procedures The laboratory associated with Advanced Radiologic Procedure. Corequisite: RT 1303. (S)

1323. Principles of Exposure I Coordinated classroom-laboratory study of radiation physics associated with x-ray production, interactions between ionizing radiations and matter, and associated health physics issues. Prerequisite: PHYS 2133 Survey of Physics for Health Professions. (F)

1332. Clinical Practicum II Supervised clinical experience in all aspects of clinical radiography. Students are evaluated with a competency-based evaluation system. Prerequisite: RT 1232. (S)

2001-2-3. Special Projects in Radiologic Technology Individual study assignment designed to be a research paper or project on selected topics in Radiologic Technology. May be repeated with various topics. Registration must be approved by Program Director. (F, S, SU)

2104. Clinical Practicum III Supervised clinical experience in all aspects of clinical radiography. Students are evaluated with a competency-based evaluation system. Prerequisite: RT 1332. (SU)

2114. Clinical Practicum IV Supervised clinical experience in all aspects of clinical radiography. Students are evaluated with a competency-based evaluation system. Prerequisite: RT 2104. (SU)

2121. Principles of Exposure II Laboratory Laboratory for RT 2122. Co-requisite: RT 2122 Principles of Exposure II. (S)

2122. Principles of Exposure II Coordinated classroom-laboratory study of radiologic imaging systems with emphasis on theories and concepts of imaging equipment, image acquisition, and processing. Prerequisite: RT 1323 Principles of Exposure I. (S)

2202. Radiologic Specials Radiographic anatomy and positioning of the gastrointestinal tract and biliary system. Includes special procedures associated with diagnostic radiology. Prerequisite: RT 1303 and 1311. (F)

2212. Principles of Exposure III Coordinated classroom-laboratory continuation of the study of radiation physics with particular emphasis on radiographic exposure technique systems and related health physics. Prerequisite: RT 2122 Principles of Exposure II. (F)

3223. Clinical Practicum V Advanced clinical experience in radiology. Students are evaluated with a competency-based evaluation system. Includes diagnostic radiology, special procedures, radiation therapy, nuclear medicine, ultrasound, computed tomography and magnetic resonance imaging. Prerequisite or corequisite: RT 2114, 2202, and 2212. (F)

3312. Radiobiology Principles of health physics, radiation protection, and radiobiology. Deals in depth with clinical applications. Prerequisite: RT 2212. (S)

3322. Radiologic Pharmacology and Drug Administration The concepts and applications of pharmacology and drug administration unique to the radiologic setting. Contrast media types and administration is covered in detail. Prerequisites: RT 3232 and RT 2202. (S)

3333. Clinical Practicum VI Continuation of RT 3233. Includes final competency evaluation. Prerequisite or corequisite: RT 3232, 3312, and 3332. (S)

3113. Radiologic Pathophysiology A general survey of medical and surgical diseases. Focus is on manifestations of disease related to all imaging modalities in radiology. (F)

See the ASU web page (www.astate.edu) for current bulletin information.
Imaging Specialist (RS)

3112. Legal and Regulatory Environment of Radiology Introduction to the growing legal and regulatory requirements being placed on radiology departments and professionals. Content includes American College of Radiology, Joint Commission on Accreditation of Healthcare Organizations, Food and Drug Administration, and state regulatory agencies as well as other legal considerations regarding personnel, operations and staffing. (S, SU II)

3133. Radiologic Sectional Anatomy Radiologic concepts and applications of sectional anatomy including transverse, sagittal and coronal sections of all body areas. Prerequisite: ZOOL 2003 and 2001. (F, S, SU II)

3152. Advanced Imaging and Therapy II Foundation information on the physics, instrumentation, and clinical procedures for cardiovascular interventional technology, mammography, bone densitometry, nuclear medicine, and radiation therapy. (S)

3811. Radiologic Quality Management Administration Administrative aspects of the concepts and applications of the various quality assurance theories and techniques. Includes those quality functions mandated by various accrediting bodies related to medical imaging and radiation therapy. (F)

4333. Radiologic Education Concepts An examination of various educational principles and methods appropriate for instruction in radiologic technology educational programs. Particular emphasis will be placed on the competency-based approach to instruction and JRCERT guidelines. Pre- or corequisite: PSY 3703 or permission of program director. (S)

4343. Radiologic Administrative Concepts Introduction to the organization, operations, and management of a radiology department. Includes an introduction to health care delivery systems, decision-making, and the management functions. Prerequisite: Senior status or permission of program director. (F)

4361-2-3. Independent Study in Radiologic Sciences Guided investigation of an advanced radiological topic selected in consultation with a member of the radiologic sciences faculty. May be repeated with different topics for a total of 6 semester credits. Prerequisite: Senior status or permission of program director. (On Demand)

4423. Cardiovascular-Interventional Procedures and Instrumentation The course will discuss angiography and interventional procedures. The student will be introduced to the specialized equipment required to produce and acquire the images and for monitoring the patient. Patient care procedures, medical and legal implications, and pharmaceutical and contrast agents specific to each examination will be defined. (F)

4442. Cardiac Physiology and Procedures This course emphasizes cardiac anatomy and physiology, electrocardiography (ECG) instrumentation, procedural performance, and elementary interpretation. Diagnostic imaging procedures and interventional therapies related to coronary disease and dysfunction are also presented. Hands-on experience with ECG equipment will be introduced. (S)

4451. Cardiovascular Interventional Clinical Education I The course will provide beginning level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in cardiovascular and interventional radiography. Prerequisites: Good standing in the Radiologic Sciences program. (F) (S) (SU)

4462. Cardiovascular Interventional Clinical Education II The course will provide beginning level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in cardiovascular and interventional radiography. Prerequisites: RS 4451. (F) (S) (SU)

4512. Mammography and Bone Densitometry Instrumentation This course provides equipment instrumentation information for mammography and bone densitometry studies. Prerequisites: none. (F)

4522. Mammography and Bone Densitometry Procedures This course provides clinical procedure information for mammography and bone densitometry studies. Prerequisites: none. (S)

4541. Mammography and Bone Densitometry Clinical Education I The course will provide advanced level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in mammography and bone densitometry. Prerequisites: Good standing in the Radiologic Sciences program. (F, S, SU)

4552. Mammography and Bone Densitometry Clinical Education II The course will provide advanced level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in mammography and bone densitometry. Prerequisites: RS 4541. (S,SU,F)

4562. Computed Tomography Clinical Education II The course will provide advanced level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in computed tomography. Prerequisites: Good standing in the Radiologic Sciences program. (F, S, SU)

4641. Computed Tomography Clinical Education I The course will provide beginning level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in computed tomography. Prerequisites: Good standing in the Radiologic Sciences program. (F) (S) (SU)

4652. Computed Tomography Clinical Education II The course will provide advanced level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in computed tomography. Prerequisites: RS 4641. (F) (S) (SU)

4713. Magnetic Resonance Imaging Physics and Instrumentation This course provides equipment instrumentation information for magnetic resonance imaging studies. Prerequisites: none. (F-odd)

4733. Magnetic Resonance Imaging Procedures This course provides clinical procedure information for magnetic resonance imaging studies. Prerequisites: Good standing in the Radiologic Sciences program. (S-odd)

4751. Magnetic Resonance Imaging Clinical Education I The course will provide level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in magnetic resonance imaging. Prerequisites: Good standing in the Radiologic Sciences program. (F) (SU)

4762. Magnetic Resonance Imaging Clinical Education II The course will provide beginning level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in magnetic resonance imaging. Prerequisites: RS 4751. (F) (SU)

4852. Advanced Radiologic Pathophysiology I This course is an intensive study of the radiographic manifestations of diseases that affect the musculoskeletal and respiratory systems, excluding neoplasms. Emphasis is on physiologic changes evident in images and differentiating which imaging modalities are most sensitive in detecting these changes. (F, SU)

See the ASU web page (www.astate.edu) for current bulletin information.
Advanced Radiologic Pathophysiology II This course is an intensive study of the radiographic manifestations of neoplasms and diseases that affect vascular systems. Emphasis is on physiologic effects of neoplasma and vascular system diseases and image manifestations of these effects. (S, SU)

Core Courses

Advanced Imaging and Therapy I Foundation information on the physics, instrumentation, and clinical procedures for digital imaging, computed tomography, magnetic resonance imaging, diagnostic medical sonography equipment as well as an overview of quality management concepts. (F)

Radiologic Research Analysis The concepts and applications of reviewing, critically evaluating, and writing radiological scientific literature. Includes manuscript preparation. Prerequisite: Senior status or permission of program director. (F)

Radiation Therapy (RST)

Introduction to Radiation Therapy and Patient Care This course will provide an overview of the foundations of radiation therapy and the practitioner's role in the health care delivery system. Prerequisites: Admission to the Radiation Therapy program. (F)

Radiation Therapy Principles and Practice I The course will provide a knowledge base for assessing, comparing, contrasting and recommending the type of radiation therapy equipment, procedure and technique, patient positioning and immobilization for appropriate tumor localization and treatment delivery. Prerequisites: Admission to the Radiation Therapy program. (F)

Radiation Therapy Principles and Practice II The course will examine and evaluate the management of specific neoplastic disease. Prerequisites: RST 4214 Radiation Therapy Principles and Practice I and good standing in the Radiation Therapy program. (S)

Radiation Therapy Principles and Practice III The course will build on the foundations of the principles of radiation therapy practice from the two previous courses. Prerequisites: RST 4224 Radiation Therapy Principles and Practice II and good standing in the Radiation Therapy program. (SU)

Radiation Therapy Clinical Treatment Planning The course will establish factors that influence and govern clinical planning of patient treatment. Prerequisites: RST 4322 Radiation Physics II, RST 4524 Radiation Therapy Clinical Education II and good standing in the Radiation Therapy program. (SU)

Radiation Therapy Physics I This course will establish a knowledge of physics pertinent to developing an understanding of radiations used in the radiation therapy clinical setting. Prerequisites: Admission to the Radiation Therapy program. (F)

Radiation Therapy Physics II The course will review and expand concepts and theories in the Radiation Physics I course. Prerequisite: RST 4312 Radiation Physics I and good standing in the Radiation Therapy program. (S)

Applied Radiation Biology This course will present basic concepts and principles of radiation biology. Prerequisites: RST 4322 Radiation Physics II, RST 4524 Radiation Therapy Clinical Education II, and good standing in the Radiation Therapy program. (SU)

Radiation Protection, Safety, and Quality Management This course will present principles of radiation protection and safety for the radiation therapist. Prerequisites: RST 4312 Radiation Physics I and good standing in the Radiation Therapy program. (S)

Radiation Therapy Clinical Education I The course will provide beginning level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Prerequisites: Good standing in Radiation Therapy program. (F)

Radiation Therapy Clinical Education II The course will have immediate content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Prerequisites: RST 4513 Radiation Therapy Clinical Education I and good standing in the Radiation Therapy program. (S)

Radiation Therapy Clinical Education III The course will have advanced content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Prerequisites: RST 4524 Radiation Therapy Clinical Education II and good standing in the Radiation Therapy program. (SU)

Diagnostic Medical Sonography (RSU)

Introduction to Ultrasound This course will provide an overview of the foundations of diagnostic medical sonography and the practitioner's role in the health care delivery system. Prerequisites: Admission to the Diagnostic Medical Sonography program. (F)

Ultrasound Physics and Instrumentation II This course will provide advanced theoretical foundations and clinical applications of ultrasound physics and instrumentation, including Doppler principles, performance testing, and bioeffects. Prerequisite: RST 4213. (S)

Abdominal Sonography I Specific anatomic and pathologic information necessary for the clinical practice of abdominal diagnostic medical sonography including abdominal organs and vascular structures. Prerequisites: RST 4213. (S)

Abdominal Sonography II Specific anatomic and pathologic information necessary for the clinical practice of abdominal diagnostic medical sonography including small parts, breast, and Doppler techniques. Prerequisite: RST 4313. (S)

Abdominal Sonography II Laboratory Directed laboratory experience using a sonographic simulator to reproduce patient pathologies necessary to performing information presented in the co-requisite lecture course. Co-requisite: RST 4341. (S)

Advanced Radiologic Pathophysiology II Laboratory Directed laboratory experience using a sonographic simulator to reproduce patient pathologies necessary to performing information presented in the co-requisite lecture course. Co-requisite: RST 4341. (S)

Advanced Imaging and Therapy I The course will provide advanced level content and clinical practice experiences designed for sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in abdominal diagnostic medical sonography. Prerequisites: Good standing in the Diagnostic Medical Sonography program. (SU)

Obstetric and Gynecologic Sonography Specific anatomic and pathologic information necessary for the clinical practice of obstetric and gynecologic diagnostic medical sonography. Prerequisites: RST 4213, Ultrasound Physics and Instrumentation. (F)

DEPARTMENT OF NURSING

Nursing (NRS)

Introduction to Nursing Introduction to the health care system. Focus on theories and concepts in assisting the individuals in maintaining activities of daily living.
1235. Nursing I Theories and concepts necessary for effective assessment of individual's and families' ability to meet activities of daily living and developmental needs. Maternal-child and adult health problems that are usual, expected, and have predictable outcomes are studied. Emphasis is placed upon the student's use of the nursing process in identifying these problems and their resolutions through relevant nursing interventions. Prerequisites: admission to the program or NRS 1213, NRSP 1422, NRS 3392, NRSP 3391; or Corequisites: NRS 3392, NRSP 3391, NRS 1252, NRSP 1243. (F)

1252. Role Development I An introduction to the roles of the associate degree nurse as a provider of care, manager of care, and member of the profession. These roles will be explored as they relate to the profession of nursing, legal and ethical issues, principles of teaching and learning, theory of nursing, professional accountability, and current health issues. Corequisites: NRS 1235 and NRSP 1243. (F)

1411. Clinical Calculations Provides additional experiences in calculation systems, conversions, and medications given in the clinical setting. Will not count as a nursing elective. Open to all ASN and BSN students, LPNs, RNs or by permission of instructor. (This course may be repeated for a maximum of three hours). (F, S)

2203. Basic Human Nutrition Basic concepts of nutrition including factors that have an impact upon nutritional practices. Special attention to age-related nutritional needs. Open to nursing and non-nursing majors. (F, S)

2215. Nursing II Continued use of the nursing process, with an emphasis upon the biopsychosocial-cultural aspects of individuals and families. Mental health and adult health problems that are usual, expected and have predictable outcomes are studied. Prerequisite: NRS 1235 and NRSP 1243. (S)

2235. Nursing III Continuation of focus on clients experiencing conditions that are usual, expected, and have predictable outcomes. Emphasis is upon the nursing process with modification and redesign of the plan of care. Prerequisite: NRS 2215, 2252, NRSP 2224, ENG 1013, and BIOL 2103 and BIOL 2101. GPA of 2.0 in required science courses. (F)

2252. Role Development II An analysis of the role of the associate degree nurse, and the legal/ethical issues in the health care system. Managerial and leadership aspects of the associate degree nurse as related to manager of care and member of the profession are discussed. Prerequisite: NRS 1235 and NRS 1252; Corequisites: NRS 2215 and NRSP 2224. (S)

2262. Role Development III Synthesis of the roles and competencies of the associate degree nurse with emphasis on the roles of manager of care and member within the profession of nursing. Selected topics on current issues and trends that influence nursing practice, organizations, ethical-legal issues and nursing management process/skills are explored. Prerequisite: NRS 2215, NRS 2252, and NRSP 2224; Corequisites: NRS 2235, NRSP 2272, and NRSP 2244. (F)

3392. Health Assessment Focus on obtaining a health history and physical assessment of the adult. An overview of the pediatric, obstetrical, and geriatric client is included. Prerequisite for admission to LPN-AASN Program; permission of instructor. Corequisite: NRSP 3391. (F, S, SU). LPNs and RNs can take prior to admission to professional program.

Nursing Practicum (NRSP)

(A clinical/laboratory fee of $10 will be assessed for each of the following courses:)

1243. Clinical Practicum I Initial medical-surgical and maternal-child health clinical experience for the student making the transition to the RN role. Nursing concepts from Nursing Agency I and Role Development I are applied to clinical practice. Corequisites: NRS 1235 and NRS 1252. (F)

1422. Foundations of Nursing Practice Practicum emphasizes the fundamental skills as utilized in maintaining activities of daily living. Prerequisite or corequisite: NRS 1214 or NRS 2314. (F, S)

2201-2-3. Clinical Practicum: Independent Study Practicum experience in specific clinical areas determined by student and instructor. Review of clinical nursing care with emphasis on the performance of specific nursing procedures. (D)

2224. Clinical Practicum II NRS 2215 is implemented. The student applies the nursing process in the care of individuals and families in all stages of the life cycle. Prerequisites: NRS 1235, NRS 1252 and NRSP 1243. (S). An additional fee is assessed for this course for a communication assessment test.

2244. Clinical Practicum III NRS 2235 is implemented. Refinement of the nursing process in providing care for selected clients. Prerequisites: NRS 2215, NRS 2252 and NRSP 2224; Corequisites: NRS 2235, NRS 2262, and NRSP 2272. (F). An additional fee is assessed for this course for the comprehensive assessment examination given to all graduating nursing students.

3391. Health Assessment Practicum Practicum in which the clinical skills associated with NRS 3392 are developed and implemented. The student obtains health histories and performs physical examinations. Prerequisite for LPN-AASN Program; permission of the instructor. Corequisite: NRS 3392. (F, S, SU)

Nursing (NRS)

2314. Concepts of Nursing Introduction to the concepts and theories basic to nursing assessment and intervention. General concepts of health, illness, and professionalism are explored. Focus is upon meeting basic human needs throughout the life span. Prerequisite: Admission to the BSN program. Corequisite: NRSP 1422. (F)

2334. Health Promotion and Introduction to Acute Care Nursing focus is on health promotion surrounding life cycle events as well as an introduction to acute care. Growth and development and family theory are addressed as professional concepts. Prerequisites: NRS 2314 and NRSP 1422. (S)

3023. Interdisciplinary Clinical Pathophysiology This course is an overview of the specific disruptions of normal physiology and alterations, mechanisms involved, their disease manifestations and the therapeutic principles underlying treatment. This course provides a link between the basic biological sciences and their clinical application. Prerequisites: Anatomy and Physiology I & II and Microbiology (or by permission of instructor). (F, S, SU)

3031-2-3. Special Problems in Nursing Specific areas with the topic and mode of study agreed upon by the student and the instructor. Course may be repeated with various topics. Registration must be approved by the department chair. (D)

3312. Introduction to Nursing Research Explores the role of the nurse in the research process and provides the skills needed to evaluate and use research findings. Prerequisite or corequisite: PSY 3103 and 3101 or SOC 3383 and 3391. Corequisite: NRS 3345 and NRSP 3355. (S)

3315. Acute Care Nursing I Health focus is on acute illness. Integrated foci include adult medical-surgical, geriatrics, pediatrics, mental health and nutrition. Prerequisites:
NRS 2334, NRSP 2343, NRS 3392 and NRSP 3391. (F)

3325. Nursing Care Systems III Practicum in which NURS 3314 is implemented. The student designs and implements care for adults and children in a secondary care setting. Prerequisite or corequisite: NRS 3314. (F)

3333. Women’s Health: Past, Present and Future Health problems of women studies with both a traditional and contemporary focus. Emphasis on current information needed by health professionals to help women achieve optimum wellness. Prerequisites: Junior level nursing status or permission of instructor. (F, SU)

3343. Clinical Pharmacology and Nursing Management Concepts essential for integration of pharmacological theory into professional nursing practice. Co-requisite: NRS 3315 or permission of instructor. (F, SU)

3345. Acute Care Nursing II Continuation of concepts introduced in NRS 3315. Prerequisites: NRS 3315 and NRS 3343. (S)

3353. Aging and the Older Adult Analysis of the aging process in today’s society. Includes theories of aging, ethical issues, biopsychosocial aging changes, impact of changing needs on support systems. Open to nursing and non-nursing majors. Prerequisites: PSY 2013 or consent of instructor. (F, SU)

3355. Nursing Care Systems IV Practicum in which theory from NRS 3344 is implemented or expanded. The student designs, implements, and evaluates care of individual clients/families in secondary care settings. Prerequisites: NRSP 3325 and prerequisite or corequisite: NRS 3344. (S)

3383. Gerontological Nursing Emphasis is placed on the normal biophysical and psychological changes which occur as part of the normal aging process. Strengths, capabilities, problems, and limitations imposed by the pathological changes of aging are identified. Values, beliefs, and attitudes as well as resources are explored. Prerequisite: Junior with 10 hours of nursing credit, Registered Nurse status, or permission of instructor. (D)

3392. Health Assessment Focus on obtaining a health history and physical assessment of the adult. An overview of the pediatric, obstetrical, and geriatric client is included. Prerequisite: ZOOL 2003, 2001, 2013, and 2011. Pre- or co-requisite: NRS 2334 and NRS 2343 or permission of instructor. Corequisite: NRSP 3391. (F, S, SU)

4053. Today’s Families: Interdisciplinary Approaches An interdisciplinary course designed to promote a critical approach to examine the family and its role in society. Prerequisite: 12 hours of coursework in Interdisciplinary Family Minor or Instructor’s permission. (S)

4311. Clinical Pharmacology and Nursing Management: Tertiary Focuses on nursing responsibilities related to medications used in complex patient care structure. Prerequisite: CHEM 1033 and 1031, RN status or permission of instructor. (F, S)

4312. Chronic Illness and Rehabilitation Nursing Focus on clients with chronic illness throughout the lifespan. Concepts of gerontology and rehabilitation are integrated. Prerequisites: NRS 3345, NRSP 3335, NRS 3332. (F, S)

4343. Professional Nursing: Community Concepts of professional nursing practice expanded to the care of families and groups of clients in the community setting. Focuses also on change theory, group process strategies and professional/health care issues. Prerequisites: NRS 3345, NRSP 3355, NRS 3343, NRS 3392 and NRSP 3391. (F, S)

4355. Critical Care and Emergency Nursing Focus of the course is on patients with potentially urgent or emergent healthcare needs which require ongoing assess-ment, immediate intervention and intensive nursing care. Prerequisites: NRS 3345, NRSP 3355, NRS 3343, NRS 3392, and NRSP 3391. (F, S)

4362. Professional Role Development Concepts of professional socialization, accountability, advocacy, issues and trends which affect the role of the nurse are analyzed and discussed. Co-requisites: NRS 4312, NRS 4343. (F, S)

4373. Professional Nursing: Management Managerial and leadership aspects of the first level nurse manager in a managed care environment are a major focus. Prerequisites: NRS 3345, NRS 3312, NRSP 3355, PSY 3103 and 3101 or SOC 3383 and 3381. (F,S)

4393. Advanced Nutritional Concepts & Therapeutic Interventions Principles of nutritional support utilized in healthcare, including nutritional assessment, nutrient delivery and implications of disease. Prerequisites: completion of one year of nursing coursework (BSN junior level status), RN licensure, or permission of instructor. (S)

4482. Critical Decision Making and Testing Competencies in Nursing Further assists nursing students to identify areas for improving critical thinking skills and test taking skills. Will enhance the student’s ability to problem solve in providing complex care to individuals, groups, communities and populations. Prerequisites: senior nursing student status or permission of instructor. (F, S)

4543. Health Care Administration Introduction to the organization, operations and administration of a modern health care environment. Includes an introduction to health care delivery systems, decision-making, and the management functions. Prerequisite: Senior status or graduate student enrolled in a CNHP program or any health related major. (F, S)

Nursing Practicum (NRSP)

(A clinical/laboratory fee of $12 will be assessed for each of the following courses:)

1422. Foundations of Nursing Practice Practicum emphasizes the fundamental skills of nursing as utilized in maintaining activities of daily living. Prerequisite or corequisite: NRS 1213 or 2314. (F)

3391. Health Assessment Practicum Practicum in which the clinical skills associated with NRS 3392 are developed and implemented. The student obtains health histories and performs physical examinations. Pre- or corequisite: NRS 2334, NRSP 2343 or permission of instructor. Corequisite: NRS 3391. (F, S, SU)

2343. Nursing Care II Practicum in which the clinical skills associated with the events of childbearing and perioperative care are developed. Prerequisites: NRS 2314 and NRSP 1422. Prerequisite or corequisite: NRS 2334. (S)

3325. Nursing Care III Practicum in which NURS 3314 is implemented. The student designs and implements care for adults and children in a secondary care setting. Prerequisite or corequisite: NRS 3315. (F)

3355. Nursing Care IV Practicum in which theory from NRS 3344 is implemented or expanded. The student designs, implements, and evaluates care of individual clients/families in secondary care settings. Prerequisites: NRS 3325 and NRS 3312. (F, S)

3391. Health Assessment Practicum Practicum in which the clinical skills associated with NRS 3392 are developed and implemented. The student obtains health histories and performs physical examinations. Pre- or corequisite: NRS 2334, NRSP 2343 or permission of instructor. Corequisite: NRS 3392. (F, S, SU)

4323. Nursing Care VII Individualized practicum for registered nurses in which senior level theory and professional course content is implemented, using local and regional

See the ASU web page (www.astate.edu) for current bulletin information.
4336. Nursing Care V Practicum in which NRS 4314 and 4343 are implemented. Provision of health promotion, health maintenance, and disease management nursing care in home-based and community-based settings. Prerequisites or corequisites: NRS 4343 and 4314. An additional fee is assessed for this course for the comprehensive assessment examination given to all graduating nursing students. (F, S)

4363. Nursing Care VIII Individualized practicum for registered nurses in which senior level theory and professional course content is implemented, using local and regional health care settings. Prerequisites: RN status. Corequisites or prerequisites: NRS 4355 and 4373. (F)

4366. Nursing Care VI Practicum in which theory from NRS 4354 and NRS 4373 is implemented. Care of clients/families in critical care and emergency care areas of the hospital. Also assumes role of coordinator/manager of client care in acute care setting. Prerequisite or corequisite: NRS 4354 and NRS 4373. An additional fee is assessed for this course for the comprehensive assessment examination given to all graduating nursing students. (F, S)

4393. Nursing Care Elective Practicum in which the student selects a clinical experience in an area of interest within a primary, secondary, or tertiary care setting. Prerequisites: Must have completed all Junior level BSN nursing courses and ZOOL 3143. (F, S)

Social Work (SW)

2203. Introduction to Social Work Explores the values, knowledge and skill base of empowerment oriented generalist social work practice. Includes historical development and organization of the social welfare system in the United States. (F, S)

2223. Social Problems Application of sociological concepts and methods in the analysis of current social problems in the United States, including family and community disorganization, delinquency and crime, mental illness, and intergroup relations. (Cross listed as SOC 2223) (F, S, SU)

3253. Social Work Practice I: Micro Practice This is the first course in the practice foundation sequence. The focus is empowerment oriented generalist practice with micro systems (individuals). Prerequisites: SW 2203, BIOL 1003, and BIOL 1001, SW 3303, or taken concurrently. (S)

3303. Human Behavior and Social Environment I Physical, psychological, social growth and development, across the life span. For social workers. Prerequisite: SW 2203. (F)

3313. Introduction to Child Welfare Policies and practices in the field of child welfare with emphasis on the needs of children and their families, the major programs designed for them, and issues for future planning. (F)

3323. Substance Abuse: Intervention and Treatment Historical review of drug and alcohol problems, with an analysis of treatment modalities, theories of substance abuse, prevention and education strategies, and social policy implications. (SU, D)

3333. Human Behavior in the Social Environment II This course is continuation of the HBSE I course. It focuses on the macro aspect of the human behavior in the areas of groups, institutions and organizations. Its purpose is to explore the behavior, influence, and interactions of these entities and their impact on social work practice. Prerequisite: SW 3303 (S and on demand)

3343. Child Abuse and Neglect Survey of theory and research of child abuse and neglect with emphasis on assessment and treatment of these problems. Prerequisite: SW 2203 or permission of the instructor. (S)

3353. Social Work with the Aging Study of the problems of older Americans together with a description of social programs serving the aged; learning social work skills in dealing with individual clients. Prerequisite: SW 2203 or permission of the instructor. (F)

4263. Social Work Practice II: Mezzo Systems This is the second course in the practice foundation sequence. The focus is generalist practice with mezzo systems (families and small groups). Prerequisite: SW 3253. Open only to seniors. To be taken concurrently with SW 4273. (F)

4273. Field Experience I Directed study and practice with clients in social welfare agencies. Supervision provided by faculty and host agency. (Admission only upon acceptance into the Social Work Program). Prerequisites: Must have completed all general education requirements with an overall GPA of 2.5 and 2.5 in major courses. Must have completed SW 3253. Must be taken concurrently with SW 4263. (F)

4283. Field Experience Seminar Discussion and sharing of problems encountered in agency settings. A combination of lectures by social work practitioners and class discussion to help students integrate theory and practice. (Admission only upon approval of instructor.) Prerequisite: SW 4263 and SW 4273. To be taken concurrently with SW 4263 and SW 4296. (S)

4296. Field Experience II Application and integration of academic content in an actual working experience. Supervision provided by faculty and host agency. (Admission only upon continued acceptance into the Social Work Program.) Prerequisite: Completion of all major requirements except SW 4303 and SW 4283, with an overall GPA of 2.5 and 2.5 in major courses. (S)

4303. Social Work Practice III: Macro Systems This is the third course in the practice foundation sequence. The focus is generalist practice with macro systems (organizations, communities) as well as policy practice. Open only to seniors. Prerequisite: SW 4263. To be taken concurrently with SW 4303 and SW 4296. (S)

4313. Social Welfare Policy Analytical evaluation of how social welfare policies are formulated and implemented. Prerequisite: SW 3333. (F)

4363. Religion and Spirituality in Social Work Practice An examination of religious and spiritual beliefs in psychosocial development, the family, social policy, community and society. (D)

4373. Social Work and Health Care Services This course is designed to provide knowledge and understanding of direct social work practice in varied health care settings. Illness, disease, trauma/disability, death and dying are examined from an ecological-systems perspective. Issues of diversity and bioethics are emphasized. (D)

4601-2-3. Special Problems Individually directed problems in Social Work. Must be arranged with the professor and approved by department chair. (TBA)
College of Sciences & Mathematics
Professor Hector Flores, Dean

Mission
The College of Sciences and Mathematics prepares students to assume their places as knowledgeable, ethical, and problem-solving leaders by providing foundational and advanced studies in the natural sciences, mathematics, computer science and statistics. A partnership among students, staff, and the faculty anchors the mission of the College of Sciences and Mathematics to expand and disseminate knowledge. The research, scholarship, creative endeavors, and professional activities of this College are intrinsically valuable, fundamental to teaching and learning throughout the University, and beneficial to the Mississippi River Delta and beyond.

The College of Sciences and Mathematics provides to all Arkansas State University students the foundation on which all higher education stands: the mathematics and the sciences. Accordingly, the College acknowledges its responsibility and is actively committed to:

- freedom of thought, inquiry and expression;
- supporting and rewarding the research, scholarship, creative endeavors, and professional activities of our faculty, staff and students;
- supporting and rewarding effective teaching, and bettering ourselves as teachers;
- recruiting, training and retaining a highly-skilled and professional staff;
- providing the finest possible research and teaching facilities, beginning with the library, and including computer, classroom and laboratory technology.

Moreover, the College of Sciences and Mathematics recognizes its responsibility to carry out these commitments in an environment that:

- promotes education of students to their fullest potential for their varied roles as members of local, national and international communities;
- promotes a spirit of community among campus, regional, national, and international constituencies;
- promotes diversity, ensures opportunities, and values honesty, respect, trust, and civility among students, staff, and the faculty.

Programs of Study
The College of Sciences and Mathematics provides Arkansas State University students with general education courses which provide the foundation for all majors and professional degrees. These include traditional studies in the mathematics and the natural and physical sciences upon which the structure of higher education is built.

The College of Sciences and Mathematics offers a wide-range of undergraduate degree programs including a Bachelor of Arts in Chemistry, and in Computer Science, a Bachelor of Science in Biology, and in Wildlife Ecology and Management, Chemistry, Physics, Computer Science and Mathematics; and a Bachelor of Science in Education in General Science (Biology, Chemistry, or Physics) and in Mathematics. The college also offers a variety of pre-professional programs tailored to advanced study. Most degree programs offer minors as well.

The College of Sciences and Mathematics grants a full-range of masters’ degree (M.A., M.S., M.P.A., and M.S.E.) programs, several Educational Specialist degree (Ed.S.) programs, and one interdisciplinary doctoral degree (Ph.D.) program in Environmental Sciences. For further information, see ASU’s Graduate Bulletin.

The college is comprised of four departments.
Department of Biological Sciences
Department of Chemistry and Physics
Department of Computer Science
Department of Mathematics and Statistics

See the ASU web page (www.astate.edu) for current bulletin information.
GRADUATION REQUIREMENT

Bachelor of Science in Education

In addition to meeting the University Requirements for all Baccalaureate Degrees as presented by the University, and the Teacher Education Program Requirements as presented by the College of Education, all candidates for a Bachelor of Science in Education degree in the College of Sciences and Mathematics must also have a minimum grade point average of 2.50 on all work attempted overall, on work in the major field, and, if a transfer student, on all work taken at this institution.

FOREIGN LANGUAGE REQUIREMENT

Bachelor of Arts

All candidates for the Bachelor of Arts degree in the College of Sciences and Mathematics must demonstrate proficiency in a foreign language. This may be done in either of the following ways:

1. By completing the second semester of the intermediate year of foreign language at the college level. Students with no foreign language experience must enroll in the first semester of the freshman year and complete 12 hours of a single language. Students with some proficiency may enroll in the more advanced courses with the approval of the instructor and the department chair. Students who have completed two years of a single foreign language in high school should enroll in Intermediate Language I. Students who have completed one year of a foreign language in high school should enroll in Elementary Language II. Students with questions about their readiness for these courses should consult with a member of the language faculty. (No credit will be awarded for courses waived.)

2. By passing an examination acceptable to the foreign language faculty as proof of proficiency equivalent to completion of the second semester of the intermediate year of a foreign language at the college level.

Bachelor of Science

All students who seek the degree of Bachelor of Science in the College of Sciences and Mathematics must demonstrate proficiency in a foreign language. This may be done in one of the following ways:

1. By completing two years of a single foreign language in high school.

2. By completing the second semester of an elementary foreign language course at the college level. Students with no foreign language experience must enroll in the first semester of the freshman year and complete six hours of a single language. Students who have completed one year of a foreign language in high school should enroll in Elementary Language II (3 hours).

3. By passing an examination acceptable to the foreign language faculty as proof of proficiency equivalent to successful completion of the second semester of the elementary year of a foreign language at the college level.

Department of Biological Sciences

Professor Aldemaro Romero, Chair; Professors Bednarz, Farris, Johnson, McDaniel, Trauth, Wheeler; Associate Professors Bennett, Buchanan, Cooksey, A. Gripp, R. Gripp, Gilmore, Huss; Assistant Professors, Christian, Loutch, McKay, Risch, Srivatsan, Vanderpool; Instructors Huggins, Wilhide

The Department of Biological Sciences serves students desiring to gain a broad background in biology, botany, environmental biology, zoology, or wildlife ecology and management. This preparation qualifies students for professional work in teaching, research, industry, or for graduate study.

See the ASU web page (www.astate.edu) for current bulletin information.
### Major in Biology

#### Bachelor of Science

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Language Requirement:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-6</td>
</tr>
</tbody>
</table>

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 3122, Plant Morphology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOL 3102, Plant Taxonomy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BIOL 1101, Plant Taxonomy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BIOL 1013, Biology of the Cell</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 1013 and 1011</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 4014, Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 1013 and 1011</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 4371, Biological Seminar</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3003 and 3001, General Entomology and Laboratory for General Entomology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 4123 and 4121, Human Genetics and Laboratory for Human Genetics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 1021, Laboratory for Biology of the Cell</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 3102, Organic Chemistry I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 3104, Organic Chemistry II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 2104, Survey of Calculus</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 2054, General Physics I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ZOOL 1043, Biology of Animals</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 1041, Laboratory for Biology of Animals</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Emphasis Area:** (Select one of the five options):

#### Biology:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4014, Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOT 4112, Plant Morphology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOT 3002, Plant Taxonomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOL 1013, Biology of the Cell</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>STAT 3333, Applied Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3002, Comparative Anatomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3012, Laboratory for Comparative Anatomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3201 and 3203, Laboratory for Animal Physiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4693, Animal Embryology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4071, Laboratory for Animal Embryology</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Botany:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4014, Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOT 3012, Plant Morphology</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOT 3002, Plant Taxonomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOL 1013, Biology of the Cell</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>STAT 3333, Applied Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 4243, Biochemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOT 4113, Plant Physiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 4111, Laboratory for Plant Physiology</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Electives:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-15</td>
</tr>
</tbody>
</table>

Total: 124-130

*If both options are completed, the additional course(s) may count as an elective.

### Pre-professional Studies:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4104, Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 4371 and 4311, Cell Biology and Laboratory for Cell Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 4243, Biochemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3002 and 3012, Comparative Anatomy and Laboratory for Comparative Anatomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3003 and 3001, Animal Physiology and Laboratory for Animal Physiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 3151, 3153, 3161, and 3163, Laboratories for Human Structure and Function I and II</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

### Environmental Biology:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4014, Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 4243, Biochemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3002 and 3011, Invertebrate Zoology and Laboratory for Invertebrate Zoology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>STAT 3333, Applied Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4012 and 4022, Animal Histology and Laboratory for Animal Histology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 4012 and 4022, Medical Myology and Laboratory for Medical Myology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 3143, Physical Chemistry with Biological Applications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHL 3713 Ethics in the Health Professions</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4021, 4022, and 4023, Ethical Issues in Animal Embryology and Laboratory for Animal Embryology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4163 and 4161, Mammalian Neurobiology and Laboratory for Mammalian Neurobiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4071, Ethics in the Health Professions</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total: 24-28

### Zoology:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4104, Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 4243, Biochemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3002, Comparative Anatomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3012, Laboratory for Comparative Anatomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3201 and 3203, Laboratory for Animal Physiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3201, Laboratory for Animal Physiology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3203, Animal Physiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4693, Animal Embryology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4071, Laboratory for Animal Physiology</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total: 25

### Electives:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-15</td>
</tr>
</tbody>
</table>

Total: 124-130

### Major in Wildlife Ecology and Management

#### Bachelor of Science

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Environmental Biology:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1013 and 1011, Biology of the Cell</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 1013 and 1011</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 1013 and 1011</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Total: 3-4

### Pre-professional Studies:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4014, Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 4371 and 4311, Cell Biology and Laboratory for Cell Biology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 4243, Biochemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3002 and 3011, Invertebrate Zoology and Laboratory for Invertebrate Zoology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>STAT 3333, Applied Statistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4012 and 4022, Animal Histology and Laboratory for Animal Histology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 4012 and 4022, Medical Myology and Laboratory for Medical Myology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 3143, Physical Chemistry with Biological Applications</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHL 3713 Ethics in the Health Professions</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4021, 4022, and 4023, Ethical Issues in Animal Embryology and Laboratory for Animal Embryology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4163 and 4161, Mammalian Neurobiology and Laboratory for Mammalian Neurobiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4071, Ethics in the Health Professions</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total: 24-28

### Zoology:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4104, Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 4243, Biochemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3002, Comparative Anatomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3012, Laboratory for Comparative Anatomy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3201 and 3203, Laboratory for Animal Physiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3201, Laboratory for Animal Physiology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ZOOL 3203, Animal Physiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4693, Animal Embryology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ZOOL 4071, Laboratory for Animal Physiology</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total: 25

### Electives:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-15</td>
</tr>
</tbody>
</table>

Total: 124-130

See the ASU web page (www.asate.edu) for current bulletin information.
Recommended Program for Pre-Chiropractic Students

### Fall Semester
- **General Education Requirements**
  - ENG 1003
  - MATH 1023
  - BOT 1103
  - ZOOL 1043

### Spring Semester
- **General Education Requirements**
  - ENG 1013
  - MATH 1043

### Sophomore Year
- **General Education Requirements**
  - ENG 2013
  - CHEM 1013

### Junior Year
- **General Education Requirements**
  - PSY 2013
  - CHEM 1011

### Senior Year
- **General Education Requirements**
  - SOCI 2013
  - PHYS 2054
  - Electives (5 hrs.)

Recommended Program for Pre-Respiratory Therapy Students

### Fall Semester
- **General Education Requirements**
  - ENG 1003
  - MATH 1023 or 1054
  - ZOOL 1043

### Spring Semester
- **General Education Requirements**
  - PSY 2013
  - ZOOL 2003
  - ZOOL 2001

### Sophomore Year
- **General Education Requirements**
  - SOCI 2013
  - CHEM 2011

### Junior Year
- **General Education Requirements**
  - PSY 2013
  - CHEM 2004

### Senior Year
- **General Education Requirements**
  - SOCI 2213
  - Phys 2054

Recommended Program for Pre-Dental Hygiene Students*

### Fall Semester
- **General Education Requirements**
  - ENG 1003
  - MATH 1023 or 1054
  - ZOOL 1043

### Spring Semester
- **General Education Requirements**
  - ENG 1013
  - MATH 2013

### Sophomore Year
- **General Education Requirements**
  - ENG 2003 or ENG 2013

### Senior Year
- **General Education Requirements**
  - PSY 2013
  - SOCI 2213

As requirements differ for each dental hygiene program, it is strongly recommended that you see an advisor before scheduling classes.

*Meets requirements for UAMS program.
**Department of Chemistry and Physics**

Associate Professor Bruce Johnson, Interim Chair; Professors Draganjac, Li, Sustich, Wyatt; Associate Professors Burns, Hannigan, Johnson, Panigot, Reeve; Assistant Professors Dowling, Hahn, Kennon, Mace, Zhang

The courses in chemistry and physics are designed to prepare individuals for teaching (Bachelor of Science degree), for employment as chemical or physics professionals, or for the pursuit of a graduate program (Bachelor of Science degree). The Bachelor of Arts degree in chemistry is designed as a basic program for students who wish to pursue further training as technical librarians, salesmen, writers, translators, patent attorneys, medical doctors, or other allied scientific fields. Sufficient elective hours are provided for concentration in other fields associated with science.

Arkansas State University is on the approved list of the Committee on Professional Training (CPT) of the American Chemical Society. For certification of the completion of CPT standards for the B.S. degree in chemistry, follow the recommended sequence of science and mathematics courses on pages 338–339.

The courses in geology are offered as enrichment courses for those who wish to have supplementary training in earth science. These courses are designed to complement all of the other science courses.

**Recommended Program for Pre-medical and Pre-dental Students**

Students interested in Pre-medical or Pre-dental studies with an emphasis on chemistry or physics are advised to pursue either the course of study listed under Major in Chemistry: Pre-professional Studies Emphasis (p. 339) or that listed under Major in Chemistry, Bachelor of Arts (pp. 338–339) or that listed under Major in Chemistry, Bachelor of Science (pp. 338 and 339) or that listed under Major in Chemistry, Bachelor of Arts (pp. 338–339) or that listed under Major in Physics, Bachelor of Science (p. 341 and 342).

---

### General Education Requirements:

**Sem. Hrs.**

See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79 ................................. 46-69

### Specific General Education Requirements:

Students with this major must take the following:

CHEM 1013, General Chemistry I .......................... 3
CHEM 1011, Laboratory for General Chemistry I 3
CHEM 1064, Precalculus Mathematics; OR MATH 2204, Calculus I 1
BIOL 1013, Biology of the Cell 1
BIOL 1021, Laboratory for Biology of the Cell 1

### Language Requirement:

**Sem. Hrs.**

Foreign Language (See page 332) ................................................................. 0-6

---

### Major in Chemistry

**Sem. Hrs.**

Bachelor of Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3121, Laboratory for Physical Chemistry I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3123, Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3131, Laboratory for Physical Chemistry II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 4204, Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 4224, Instrumentation</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 4232, Chemical Literature</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 4243, Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4271-2-3, Research in Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4281, Chemistry Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MATH 2204, Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2214, Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2354, Calculus III</td>
<td>3</td>
</tr>
<tr>
<td><strong>PHYS 2034, University Physics I, OR MATH 2024, Calculus I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>PHYS 2044, University Physics II, OR MATH 2024, Calculus I</strong></td>
<td>4</td>
</tr>
</tbody>
</table>

**Total 125-138**

---

### Environmental:

**Sem. Hrs.**

GEOL 1003, Environmental Geology ......................... 3
GEOL 1011, Environmental Geology Lab .................. 1
CHEM 4043, Environmental Chemistry .................. 3
CHEM 4053, Geochemistry  .................................. 3
Electives ...................................................... 0-8
**Total 10-18**

---

### Pre-professional Studies:

**Sem. Hrs.**

ZOOL 1043, Principles of Zoology ...................... 3
ZOOL 1041, Laboratory for Principles of Zoology .... 1
Electives ...................................................... 8
**Total 0-16**

---

### Specific General Education Requirements:

Students with this major must take the following:

CHEM 1013, General Chemistry I .......................... 3
CHEM 1011, Laboratory for General Chemistry I 3
CHEM 1064, Precalculus Mathematics; OR MATH 2204, Calculus I 1
MATH 1054, Precalculus Mathematics; OR MATH 2204, Calculus I 1
BIOL 1013, Biology of the Cell 1
BIOL 1021, Laboratory for Biology of the Cell 1

---

### Major in Chemistry

**Sem. Hrs.**

Bachelor of Arts

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3121, Laboratory for Physical Chemistry I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3123, Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3131, Laboratory for Physical Chemistry II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 4204, Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 4224, Instrumentation</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 4232, Chemical Literature</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 4243, Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4271-2-3, Research in Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4281, Chemistry Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MATH 2204, Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2214, Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2354, Calculus III</td>
<td>3</td>
</tr>
<tr>
<td><strong>PHYS 2034, University Physics I, OR MATH 2024, Calculus I</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>PHYS 2044, University Physics II, OR MATH 2024, Calculus I</strong></td>
<td>4</td>
</tr>
</tbody>
</table>

**Total 125-138**

---

### Environmental:

**Sem. Hrs.**

GEOL 1003, Environmental Geology ......................... 3
GEOL 1011, Environmental Geology Lab .................. 1
CHEM 4043, Environmental Chemistry .................. 3
CHEM 4053, Geochemistry .................................. 3
Electives ...................................................... 0-8
**Total 10-18**

---

### Pre-professional Studies:

**Sem. Hrs.**

ZOOL 1043, Principles of Zoology ...................... 3
ZOOL 1041, Laboratory for Principles of Zoology .... 1
Electives ...................................................... 8
**Total 0-16**

---

**Recommended Program for Pre-medical and Pre-dental Students**

Students interested in Pre-medical or Pre-dental studies with an emphasis on chemistry or physics are advised to pursue either the course of study listed under Major in Chemistry: Pre-professional Studies Emphasis (p. 339) or that listed under Major in Chemistry. Bachelor of Science (pp. 338 and 339) or that listed under Major in Chemistry, Bachelor of Arts (pp. 338–339) or that listed under Major in Physics, Bachelor of Science (p. 341 and 342).

---

**Emphasis Area: (Select one of the three options):**

### Chemistry:

**Sem. Hrs.**

Geology or Biological Sciences Elective .................. 3
Electives ...................................................... 5-15
**Total 8-18**

### Environmental:

**Sem. Hrs.**

Environmental Geology ....................................... 3
Environmental Geology Lab .................................. 1
Environmental Chemistry ................................... 3
Environmental Chemistry Lab ............................... 1
Electives ...................................................... 0-8
**Total 10-18**

### Pre-professional Studies:

**Sem. Hrs.**

Biological Sciences Elective ................................ 8
Electives ...................................................... 0-6
**Total 12-18**

---

See the ASU web page (www.astate.edu) for current bulletin information.
Specific General Education Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2034, University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 2044, University Physics II</td>
<td></td>
</tr>
</tbody>
</table>

* PHY 2034, University Physics I and PHYS 2044, University Physics II are required only if not taken to satisfy a part of General Education Requirements.

Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2313, Principles of Macroeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 124

---

Chemistry: Pre-pharmacy Emphasis

Following is one suggested sequence by which the Freshman and Sophomore year requirements for the Bachelor of Arts degree in Chemistry: Pre-pharmacy Emphasis may be completed. These courses will satisfy the pre-pharmacy requirements for the University of Arkansas for Medical Sciences, College of Pharmacy. A degree is not required for admission to pharmacy school; however, those students who wish to complete the Bachelor of Arts degree should continue with the Junior Year and Senior Year sequence outlined above under Chemistry, Bachelor of Arts. (See pages 25-24 for development courses required for students with lower ACT scores. Students should consult with their adviser for a plan that best meets individual needs.

**Major in General Science: Chemistry Emphasis**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3054, Quantitative Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3101, Laboratory for Organic Chemistry</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3103, Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3111, Laboratory for Organic Chemistry II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3113, Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 3121, Laboratory for Physical Chemistry I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3123, Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4204, Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>*MATH 2004, Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2054, General Physics I, and PHYS 2064, General Physics II</td>
<td></td>
</tr>
</tbody>
</table>

*Required if qualified*.

Major Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2034, University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 2044, University Physics II</td>
<td></td>
</tr>
</tbody>
</table>

* Required if qualified, may begin MATH 2194 or MATH 2204.

---

Major in Physics Bachelor of Science

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2054, General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2064, General Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 41-45

---

Professional Education Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 3703, Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SCED 5154, Introduction to Secondary Teaching</td>
<td>4</td>
</tr>
</tbody>
</table>

* SCED 4953, Methods and Materials for Teaching Science in the Secondary School | 5 |

**TICH 4863, Teaching Internship in the Secondary School | 12 |

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCED 4713, Educational Measurement with Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 2183, Structured Programming I</td>
<td>2</td>
</tr>
<tr>
<td>CS 2181, Laboratory for Structured Programming I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1013, General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1011, Laboratory for General Chemistry I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1023, General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1021, Laboratory for General Chemistry II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 2214, Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3254, Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 4403, Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2044, University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2103, Thermal Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3153, Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3263, Electromagnetic Theory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3303, Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3253, Optics</td>
<td>3</td>
</tr>
<tr>
<td>Physiological Laboratory Experience (Chosen from PHYS 3272 &amp; 3282, Physical Instrumentation I &amp; II, and 4432 &amp; 4442, Advanced Physics Laboratory I &amp; II)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4353, Mathematical Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 4553, Principles of Quantum Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 4693, Research in Physics-Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 54

**Electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 3303, Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3253, Optics</td>
<td>3</td>
</tr>
<tr>
<td>Physiological Laboratory Experience (Chosen from PHYS 3272 &amp; 3282, Physical Instrumentation I &amp; II, and 4432 &amp; 4442, Advanced Physics Laboratory I &amp; II)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4353, Mathematical Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 4553, Principles of Quantum Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 4693, Research in Physics-Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 54

**Department of Computer Science**

Associate Professor Jeff Jenness, Chair; Associate Professors Hammerand, Assistant Professors Huang, Jiang, Su; Instructors Causey, Smith, Spencer

The course offerings in the department are designed to provide students with the broad background necessary for employment in industry, government, education, or as a basis for graduate study.

**Major in Computer Science**

**Bachelor of Arts**

**General Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 2183, Structured Programming I</td>
<td>2</td>
</tr>
<tr>
<td>CS 2181, Laboratory for Structured Programming I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1013, General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1011, Laboratory for General Chemistry I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1023, General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1021, Laboratory for General Chemistry II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 2214, Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3284, Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3254, Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4403, Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1103, Introduction to Space Science OR</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3153, Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2044, University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 3153, Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3203, Electromagnetic Theory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3303, Modern Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 46

**Professional Education Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2214, Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3284, Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 4403, Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1103, Introduction to Space Science OR</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3153, Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3203, Electromagnetic Theory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 3303, Modern Physics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 46

**see the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
For each laboratory course taken, both the lecture and laboratory portions must be passed before credit for graduation is assigned.

1001. Laboratory for Biological Science Two hours per week. To be taken concurrently with BIOL 1003. (F, S, SU)

1003. Biological Science The major characteristics and processes of life emphasizing the human organism. Promotes understanding of diversity and unity among living organisms with focus on ecological interactions and responsibilities of people within their social/natural environment. Lecture three hours per week. (F, S, SU)

1013. Biology of the Cell An introduction to structures and processes in cells, including cellular evolution, biologically important molecules, organelle structure and function, and cellular energy. Prerequisite: CHEM 1013. Lecture three hours per week. (F, S)

1021. Laboratory for Biology of the Cell Two hours per week. To be taken concurrently with BIOL 1012. Prerequisite: CHEM 1011. (F, S)

1033. Biology of Sex Biological basis of sex and reproduction with an emphasis on humans. Course will provide students with a basic functional understanding of human systems, which will lead to informed decisions regarding sexual and reproductive health. Lecture three hours per week. Prerequisite: None. To be taken concurrently with BIOL 1001. (S)

1043. Plants and People: Shaping the Future Significants of plants and plant products in human life. Course content centers around plants as representative biological organisms, and their role in shaping human society. Lecture three hours per week. To be taken concurrently with BIOL 1001. (F, S)

1063. People and the Environment Major environmental issues facing our society will be covered to equip students to become part of the solution to many environmental challenges confronting us this century. Lecture three hours per week. To be taken concurrently with BIOL 1001. (F, S)

2101. Laboratory for Microbiology for Nursing and Allied Health Two hours per week. To be taken concurrently with BIOL 2103. (Special course fee: $10.00) (F, S, SU)

2103. Microbiology for Nursing and Allied Health Bacteria, viruses, rickettsiae, chlamydiae, molds, yeasts, and protozoans as they relate to human health. Lecture three hours per week. (F, S, SU)

3001. Introduction to Medical and Dental Practices This course introduces students to the diversity of specialty practices within the fields of medicine and dentistry. Prerequisites: BIOL 1013/1021; ZOOL 1043/1041. Enrollment limited to students seeking a career in dentistry, medicine, podiatry, or optometry. Graded pass/fail; credit cannot be applied to degree requirements. (S)

3021. Techniques for Medical Exam Test-Taking This course introduces students to the Medical College Aptitude Test (MCAT). Basic scientific principles and test-taking strategies within the fields of medicine will be covered. Prerequisites: Enrollment limited to students seeking a career in medicine. Graded pass/fail; credit cannot be applied to degree requirements. (S)

3121. Laboratory for Principles of Ecology Two hours per week. To be taken concurrently with BIOL 3122.

3122. Principles of Ecology The relation of plants to environmental factors of soil, climate, and biotics. Lecture two hours per week. Prerequisites: BOT 1101 and 1103 and ZOOL 1043 and 1041. (F, S)
3311. **Laboratory for Genetics** DNA observation, DNA isolation, heredity and variation with applications to bacteria, plants and animals will be investigated in the laboratory. Three hours per week. To be taken concurrently with BIOL 3313. (F, S)

3313. **Genetics** Heredity and variation with applications to plants and animals. Lecture three hours per week. Prerequisites: BOT 1101 and 1103, and ZOOL 1041 and 1043. (F, S)

3513. **Evolution** A critical review of evolutionary principles; primarily the neo-Darwinian theory, with comparisons to newly emerging theories. Lecture, selected readings, writings, and group discussions. Prerequisites: BIOL 1001 and 1003. (S-odd)

4001. **Laboratory Techniques in Electron Microscopy** An introduction to the preparation of biological materials for viewing with the scanning electron microscope. Emphasis will be placed on preparative techniques that are commonly used in the laboratory. Lecture one hour per week. Prerequisite: eight hours upper-level biology and consent of instructor. (F -even)

4003. **Laboratory for Laboratory Techniques in Electron Microscopy** Six hours per week. To be taken concurrently with BIOL 4001. (F -even)

4014. **Microbiology** Morphology, physiology, taxonomy and cultivation of bacteria, viruses, fungi, and protozoans with an emphasis on medically relevant bacteria. Relationship of microorganisms to animals, plants, and the environment. Lecture two hours per week and laboratory four hours per week. Prerequisites: BIOL 1001 and CHEM 1023 and BIOL 1013 or permission of instructor. (F, S, Su -even)

4111. **Laboratory for Issues in Human Ecology** Two hours per week. To be taken concurrently with BIOL 4112. (SU -odd)

4112. **Issues in Human Ecology** A broad ecological approach demonstrating problems of modern society such as environmental deterioration, hunger, and resource depletion. Lecture two hours per week. (SU -odd)

4121. **Laboratory for Human Genetics** Three hours per week. To be taken concurrently with BIOL 4123. (F -even)

4123. **Human Genetics** Current advances in the understanding of the human genome. Lecture three hours per week. Prerequisite: BIOL 3313. (F -even)

4131. **Laboratory for Cell Biology** Two hours per week. To be taken concurrently with BIOL 4133. (F -even)

4133. **Cell Biology** Organization and activities of cells, with emphasis on the ultrastructure and function of cellular organelles. Lecture three hours per week. Prerequisites: ZOOL 1041, 1043, and CHEM 1023 and 1021. (S)

4141. **Microtechnique** Methods of killing, fixing, staining, and mounting tissues. Lecture one hour per week. Prerequisites: BOT 1101 and 1103; ZOOL 1041, 1043, and CHEM 2064 or 3103 and 3101. (F -odd)

4142. **Laboratory for Microtechnique** Four hours per week. To be taken concurrently with BIOL 4141. (F -odd)

4213. **Population Genetics** This course will investigate the theories describing the temporal nature of the genetic structure of populations. There will be an emphasis on problem solving applying statistical tools. Intended for students entering the disciplines of systematics, conservation, agriculture, and wildlife and fisheries sciences. (S, even years)

4263. **Virology** The structure, function, and classification of viruses, and their impact on modern society and the biological world. Lecture three hours per week. Prerequisites: BIOL 2103 or BIOL 3313 or BIOL 4012 or BIOL 4133. (F -even)

4271. **Laboratory for Immunology** Study of classical and current immunology techniques such as ELISA, immuno-electrophoresis and Western Blot analysis. Laboratory 3 hours per week. Prerequisites: BIOL 1013 and CHEM 1013. (F)

4273. **Immunology** Study of the human immune system. Topics include innate and acquired immunity, complement fixation and disorders of the immune system. Lecture 3 hours per week. Prerequisites: BIOL 1013 and CHEM 1013. (F)

4313. **Biospeleology: Life in Darkness** This course analyzes the biology of organisms that live in hypogean (subterranean) environments, particularly in cave, phreatic, and karst habitats. That includes a survey of hypogean organisms, their evolution, ecology, and conservation biology. Course prerequisites, at least two of the following: BIOL 3513, Evolution, BIOL 3122, Principles of Ecology, and BIOL 3313, Genetics, and permission of the instructor. (S-even)

4323. **Biology of Marine Mammals** This course analyzes the biology of marine mammals based on their adaptations to the aquatic environment from evolutionary, anatomical, physiological, and ecological perspectives. Prerequisites will be at least the following courses: ZOOL 3002, Comparative Anatomy, ZOOL 4032, Mammalogy, ZOOL 4153, Wildlife Management, BIOL 3122, Principles of Ecology, BIOL 3513, Evolution, and permission of the instructor. (S-odd)

4333. **Cell Signaling** This course will provide an understanding of key concepts about cellular signaling mechanisms, major signaling pathways identified to date, and about the methods used to study these pathways. Three hours per week during spring semester. Prerequisites: BIOL 1013, Biology of the Cell, or BIOL 4133, Cell Biology, or permission of the instructor. (S-odd)

4361. **Laboratory for Limnology** Two hours per week. To be taken concurrently with BIOL 4363. (F -odd)

4363. **Limnology** Physicochemical conditions of fresh water, and their effects on aquatic life, including plankton analysis and bottom fauna studies. Lecture three hours per week. Prerequisite: BIOL 1041 and 1043. (F -odd)

4371. **Biological Seminar** Conferences, readings, and reports on material relevant to the biological sciences. Required of all department majors. (Open only to biology department majors with 16 hours or more of course work in the subject area.) (F, S, SU)

4373. **History of Biological Ideas** This course analyzes the history of biological ideas such as evolution, heredity, spontaneous generation, and molecular biology, aimed at a better understanding not only of the historical background of current research but also on how science proceeds. Prerequisites will be at least two of the following courses: BIOL 3513, Evolution, BIOL 3122, Principles of Ecology, and BIOL 3313, Genetics, and permission from the instructor. (F-odd)

4391-2-3. **Special Problems in Biology** (F, S, SU)

4441-2-3 **Special Topics in the Biological Sciences** Topical or technique driven seminar relating to the biological sciences that will lead to the training of students in a body of work, such as newly developed research technique/approach. Number of credit hours will vary. Prerequisites: consent of the instructor. May be repeated for a total credit of 6 hours. (F,S)

See the ASU web page (www.astate.edu) for current bulletin information.
Botany (BOT) (Special course fees may apply.)

For each laboratory course taken, both the lecture and laboratory portions must be passed before credit for graduation is assigned.

1101. **Laboratory for Biology of Plants**  Three hours per week. To be taken concurrently with BOT 1103. (F, S, SU -odd)

1103. **Biology of Plants**  Form, structure, function, and reproduction of plants. Lecture three hours per week. (F, S, SU - odd)

3001. **Wild Flowers of Arkansas**  Identification and conservation of wild flowers in Arkansas, plus studying those that are edible, endangered or rare, poisonous, or may be used in flower gardens. Lecture one hour per week. Open to all majors. (SU -odd/every 4 years)

3011. **Laboratory for Wild Flowers of Arkansas**  Two hours per week. To be taken concurrently with BOT 3001. (SU -odd/every 4 years)

3013. **Plant Morphology**  Development, structure, and reproduction of plants. Lecture three hours per week. Prerequisites: BOT 1101 and 1103. (F -odd)

3021. **Laboratory for Plant Morphology**  Two hours per week. To be taken concurrently with BOT 3013. (F -odd)

3101. **Plant Taxonomy**  A taxonomic study of the regional flowering plants and important plant families of North America. Lecture one hour per week. Prerequisites: BOT 1101 and 1103. (S -odd)

3102. **Laboratory for Plant Taxonomy**  Four hours per week. To be taken concurrently with BOT 3101. (S - odd)

3113. **Economic Botany**  Economic plants and their use by man. Lecture three hours per week. Prerequisites: BOT 1101 and 1103. (SU -even/every 4 years)

3141. **Laboratory for Plant Pathology**  Two hours per week. To be taken concurrently with BOT 3142. (S)

3142. **Plant Pathology**  Nature, cause, and control of diseases of orchard, garden, and field crops. Lecture two hours per week. Prerequisites: BOT 1101 and 1103. (S)

4101. **Laboratory for Anatomy of Vascular Plants**  Two hours per week. To be taken concurrently with BOT 4102. (SU -odd/every 4 years)

4102. **Anatomy of Vascular Plants**  Development and structure of the vascular plants. Lecture two hours per week. Prerequisites: BOT 1101 and 1103. (SU -odd/every 4 years)

4111. **Laboratory for Plant Physiology**  Three hours per week. To be taken concurrently with BOT 4113. (S - even)

4113. **Plant Physiology**  General principles of conduction, cellular reactions, respiration, growth, photosynthesis, movement, hormones, and metabolism in plants. Lecture three hours per week. Prerequisites: BOT 1101 and 1103; CHEM 2064 or 3103 and 3101. (S -even)

4171. **Laboratory for Wetland Plant Ecology**  Two hours per week. To be taken concurrently with BOT 4172. (S -odd)

4172. **Wetland Plant Ecology**  A study of plant responses to environmental factors during germination, growth, reproduction, and dormancy. Lecture two hours per week. Prerequisites: BIOL 3121 and 3122 or permission of professor or chair. (S - odd)

4181. **Aquatic Plants**  Structure, classification, and ecology of freshwater algae and freshwater aquatic vascular plants. Lecture one hour per week. Prerequisites: BOT 1101 and 1103. (F -even/every 4 years)

4182. **Laboratory for Aquatic Plants**  Four hours per week. To be taken concurrently with BOT 4181. (F -even/every 4 years)

4191. **Laboratory for Mycology**  Two hours per week. To be taken concurrently with BOT 4192. (F -odd)

4192. **Mycology**  Morphology, cytology, genetics, and physiology of fungi. Lecture two hours per week. Prerequisites: BOT 3012 and 3022. (F -odd)

4281. **Laboratory for Medical Mycology**  Two hours per week. To be taken concurrently with BOT 4282. (F -even)

4282. **Medical Mycology**  Cutaneous, systemic, and opportunistic fungus diseases (mycoses) of man and other animals. Lecture two hours per week. Prerequisites: BOT 1101 and 1103. (F -even)

Entomology (ENT)

For each laboratory course taken, both the lecture and laboratory portions must be passed before credit for graduation is assigned.

3001. **Laboratory for General Entomology**  Two hours per week. To be taken concurrently with ENT 3003. (F)

3003. **General Entomology**  Identification, structure, and life history of the principal insect orders. Lecture three hours per week. Prerequisites: ZOOL 1041 and 1043. (F)

3013. **Economic Entomology**  Life history, distribution, and control of injurious insects. Lecture three hours per week. Prerequisites: ZOOL 1041 and 1043. (S)

4001. **Aquatic Entomology**  Identification, life histories, and ecology of aquatic arthropods, with emphasis on freshwater insects. For students in wildlife management, fisheries management, aquatic biology, and advanced entomology. Lecture one hour per week. Prerequisites: ENT 3001 and 3003; BIOL 3121 and 3122 or ZOOL 4201 and 4202. (S -odd)

4002. **Laboratory for Aquatic Entomology**  Four hours per week. To be taken concurrently with ENT 4001. (S -odd)

Environmental Biology (ENVR) (Special course fees may apply.)

For each laboratory course taken, both the lecture and laboratory portions must be passed before credit for graduation is assigned.

4003. **Conservation Biology**  Study of global and local biological resources, including the diversity of life, the value of biodiversity, the importance of diversity to humans and human cultures, and interdisciplinary strategies to conserve biological resources. Lecture three hours per week. Prerequisites: BIOL 3122 or permission of instructor. (S -odd)

4101. **Laboratory for Environmental Microbiology**  Laboratory and field investigation into the role of microbes in the environment. Two hours per week. To be taken concurrently with ENVR 4103. (S -odd)

See the ASU web page (www.astate.edu) for current bulletin information.
4103. Environmental Microbiology Study of the physiology and diversity of microorganisms and their role in cycling of nutrients and mineralization of pollutants in the world. Prerequisites: CHEM 1023 and BIOL 2103 or 4012, or BIOL 4133. (S -odd)

4121/5121. Radiation Safety Theory and techniques for dealing with radiation and radioactive materials. Required for students wishing to use radioactive materials on campus. Prerequisite: Permission of instructor. (D)

4202. Legal Aspects of Environmental Management Policy, law and regulations relating to society's use, management and protection of natural resources. The course will present the differences and similarities between environmental regulation and previous social regulation, and examine the logic behind current regulatory programs. Prerequisite: BIOL 1003 and BIOL 1001 or equivalent. Lecture two hours per week. (S -even)

4203. Environmental Toxicology: Mechanisms and Impacts Understanding the basic principles behind the study of impacts and the mechanisms of physiological disturbances associated with environmental toxicant exposure to natural systems. Prerequisites: BIOL 4133 and BIOL 4131 or CHEM 4243 or permission of instructor. Lecture three hours per week. (F -odd)

4301. Laboratory for Environmental Biology Field and laboratory exposure to ecological, economic and sociological aspects of management of water, soil and air resources. Content will vary based on current topics of importance in the field of environmental science. Laboratory three hours per week. Prerequisites: BIOL 3122 or ZOOL 4203, ENVR 4203, or permission of instructor. To be taken concurrently with ENVR 4303. (F)

4303. Environmental Biology Exposure to ecological, economic and sociological aspects of management of water, soil and air resources. Content will vary based on current topics of importance in the field of environmental biology. Lecture three hours per week. Prerequisites: BIOL 3122 or ZOOL 4203, ENVR 4203, or permission of instructor. (F -odd)

Zoology (ZOOL) (Special course fees may apply.)

For each laboratory course taken, both the lecture and laboratory portions must be passed before credit for graduation is assigned.

1011. Laboratory for Human Anatomy Study of the structure of the human body with emphasis on the muscular, skeletal, nervous, and vascular systems. For Radiologic Technology Science majors only. Two hours per week. To be taken concurrently with ZOOL 1013. (F)

1013. Human Anatomy Study of the structure of the human body with emphasis on the muscular, skeletal, nervous, and vascular systems. For Radiologic Technology Science majors only. Three hours per week. To be taken concurrently with ZOOL 1011. (F)

1021. Laboratory for Human Physiology Study of the function of the human body with emphasis on the muscular, skeletal, nervous, respiratory and vascular systems. For Clinical Laboratory Science associate degree majors only. Two hours per week. To be taken concurrently with ZOOL 1023. (S)

1023. Human Physiology Study of the function of the human body with emphasis on the muscular, skeletal, nervous, respiratory and vascular systems. For Clinical Laboratory Science associate degree majors only. Three hours per week. To be taken concurrently with ZOOL 1021. (S)

1041. Laboratory for Biology of Animals Two hours per week. To be taken concurrently with ZOOL 1043. (F, S, SU -even)

1043. Biology of Animals Fundamentals of modern zoology and a survey of the phyla. Lecture three hours per week. (F, S, SU -even)

2001. Laboratory for Human Anatomy and Physiology I The behavior of matter with respect to life processes; cells, tissues; functional anatomy of integumentary, skeletal, muscular and nervous systems; cat anatomy; nerve and muscle preparations and recordings. Two hours per week. No prerequisites. To be taken concurrently with ZOOL 2003. (F, S, SU)

2003. Human Anatomy and Physiology I Introduction to the biology of atoms, molecules; organelles and cellular functions; tissues; functional anatomy of integumentary, skeletal, muscular and central nervous systems; interaction with external environment. Three hours per week. No prerequisites. (F, S, SU)

2011. Laboratory for Human Anatomy and Physiology II Functional anatomy of the major sense organs, digestive, respiratory, cardiovascular systems; urogenital anatomy, renal function, gamete production, embryogenesis; experiment with autonomic control mechanisms. Two hours per week. Prerequisites: ZOOL 2001, 2003. To be taken concurrently with ZOOL 2013. (F, S, SU)

2013. Human Anatomy and Physiology II Major sense organs; autonomic nervous system and internal environment; neuro-endoctrine control mechanisms; respiratory and cardiovascular functions; oxygen/carbon dioxide transport; liver functions; digestive, renal and reproductive processes. Three hours per week. Prerequisites: ZOOL 2001, 2003. (F, S, SU)

3002. Comparative Anatomy Chordate morphology, phylogeny, ontogeny, organology, and homology. Lecture two hours per week. Prerequisites: ZOOL 1041 and 1043. (F)

3012. Laboratory for Comparative Anatomy Four hours per week. To be taken concurrently with ZOOL 3002. (F)

3122. Invertebrate Zoology Classification and natural history of representative invertebrates. Lecture two hours per week. Prerequisites: ZOOL 1041 and 1043. (S -even)

3123. Laboratory for Invertebrate Zoology Four hours per week. To be taken concurrently with ZOOL 3122. (S -even)

3143. Pathophysiology The physiology of pathological disturbances and inborn errors. Mechanism of disturbance, body compensating efforts, and adaptive responses of man. Lecture three hours per week. Prerequisites: ZOOL 2001, 2003, 2011, and 2013. (Not open to Biological Sciences majors.) (F, S)

3151. Laboratory for Human Structure and Function I Two hours per week. To be taken concurrently with ZOOL 3153. (F)

3153. Human Structure and Function I This course covers the structure and function of the human organism. Topics covered include: cellular function, skeletal, muscular and nervous systems. Prerequisite: ZOOL 1043 and 1041; CHEM 1023 and 1021. (F)

3161. Laboratory for Human Structure and Function II Two hours per week. To be taken concurrently with ZOOL 3163. (S)

3163. Human Structure and Function II This course covers the structure and function of the human organism. Topics covered include: special senses and endocrine, respiratory, cardiovascular, digestive, urinary, reproductive and integumentary systems. Prerequisites: ZOOL 3153 and 3151. (S)
3201. Laboratory for Animal Physiology Three hours per week. To be taken concurrently with ZOOL 3203. (S)

3203. Animal Physiology Chemical, physical, and biological functions of systems, including the study of metabolism and inter-relationships of organ systems to the entire organism. Lecture three hours per week. Prerequisites: ZOOL 1041 and 1043; CHEM 1021 and 1023. (S)

3611. Physical Diagnosis This course provides an introduction to clinical medicine for Pre-medical students by teaching the basics of physical examination. Prerequisite: ZOOL 1043 and 1041. Enrollment limited to Pre-medical students. Graded pass/fail, credit cannot be applied to degree requirements. (F)

3621. Introduction to Pathology This course introduces Pre-medical students to presentation, physical findings, etiology and basic treatment of a number of common diseases and conditions. Prerequisite: ZOOL 1043 and 1041. Enrollment limited to Pre-medical students. Graded pass/fail, credit cannot be applied to degree requirements. (S)

4001. Fishery Biology Identification, ecology, food habits, management, and behavior of fishes. Lecture one hour per week. Prerequisites: ZOOL 1041 and 1043. (SU -even)

4002. Laboratory for Fishery Biology Four hours per week. To be taken concurrently with ZOOL 4001. (SU -even)

4012. Animal Histology Cells and tissues of the organ systems of vertebrates. Lecture two hours per week. Prerequisites: ZOOL 3002 and 3012. (S)

4022. Laboratory for Animal Histology Four hours per week. To be taken concurrently with ZOOL 4012. (S)

4031. Laboratory for Mammalogy Three hours per week. To be taken concurrently with ZOOL 4032. (F -even)

4032. Mammalogy Classification, distribution, structure, ecology, adaptations, and economic importance of mammals. Lecture two hours per week. Prerequisites: ZOOL 1041 and 1043. (F -even)

4042. Applied Aquaculture Field course in which principles of aquaculture are applied within several public and private enterprises. Intended for the student interested in wildlife, fisheries biology, and agriculture. Prerequisites: ZOOL 4001 and 4002. (SU)

4052. Applied Fisheries Field course in which principles are applied within several fisheries management settings. Intended for the Wildlife Ecology and Management major. Prerequisite: ZOOL 4001. (SU)

4063. Animal Embryology Study of reproduction and development in animals including reproductive systems, gamete formation, fertilization, early cleavage, formation of germ layers, and development of the organ systems. Lecture three hours per week. To be taken concurrently with ZOOL 4071. Prerequisites: ZOOL 1041 and 1043. (S)

4071. Laboratory for Animal Embryology Two hours per week. To be taken concurrently with ZOOL 4063. (S)

4151. Laboratory for Wildlife Management Two hours per week. To be taken concurrently with ZOOL 4153. (F -even)

4153. Wildlife Management The ecology and management of wildlife species and their environment, with emphasis on fish, waterfowl, upland game birds, and mammals. Lecture three hours per week. Prerequisites: ZOOL 1041 and 1043. (F -even)

4161. Laboratory for Mammalian Neurobiology Two hours per week. To be taken concurrently with ZOOL 4163. (SU -even/every 4 years)

4163. Mammalian Neurobiology A detailed study of the mammalian nervous system with particular emphasis on morphological aspects. Lecture three hours per week. Prerequisites: ZOOL 1041 and 1043, or 2001 and 2003, or permission of instructor. (SU -even/every 4 years)

4201. Laboratory for Animal Ecology Two hours per week. To be taken concurrently with ZOOL 4202. (F-odd)

4203. Animal Ecology The relationship of animals to their chemical, physical, and biological environment, and the distribution of animal life. Lecture three hours per week. Prerequisites: ZOOL 4012 and 4041. (F-odd)

4222. Parasitology Parasites of vertebrates and plants, with emphasis on protozoan and helminth parasites of man and domestic animals. Lecture two hours per week. Prerequisites: ZOOL 1041 and 1043. (SU -even)

4232. Laboratory for Parasitology Four hours per week. To be taken concurrently with ZOOL 4222. (SU -even)

4241. Laboratory for Ichthyology with ZOOL 4242. (F -even)

4242. Ichthyology Taxonomy, distribution, natural history, and economic importance of fishes, with emphasis on Arkansas species. Lecture two hours per week. Prerequisites: ZOOL 1041 and 1043. (F -even)

4251. Laboratory for Herpetology Two hours per week. To be taken concurrently with ZOOL 4252. (S -even)

4252. Herpetology Collection, identification, classification, distribution, economic importance, and life histories of amphibians and reptiles, with emphasis on Arkansas species. Lecture two hours per week. Prerequisites: ZOOL 1041 and 1043. (SU -even)

4261. Laboratory for Ornithology Three hours per week. To be taken concurrently with ZOOL 4263. (S -even)

4263. Ornithology Morphology, physiology, taxonomy, behavior, ecology, natural history, zoogeography, and evolution of birds. Lecture three hours per week. Prerequisites: ZOOL 1041 and 1043. (S -even)

4271. Laboratory for Wildlife Management Investigational Techniques Three hours per week. To be taken concurrently with ZOOL 4273. (S -odd)

4273. Wildlife Management Investigational Techniques Identification of wildlife problems, project design, interpretation and construction of wildlife maps, food habit and census techniques, wildlife populations and habitat analyses, predictive population dynamics, and introduction to modeling and wildlife decision-making procedures. Lecture three hours per week. Prerequisites: ZOOL 1041 and 1043. (S -odd)

4383. Wildlife Program Internship Participation in a professional wildlife educational, management or research program activity. Internship is arranged by the student and may be a volunteer or paid position. Entails a minimum of 160 work hours. Must be approved by adviser or chair. (F, S, SU)
Chemistry (CHEM) (Special course fees may apply.)

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The University reserves the right to change course scheduling when circumstances dictate such changes.

1003. Introduction to Chemistry Fundamentals of chemical terms and applications to laboratory studies. Extensive drills on calculations and use of hand-held calculator in problem solving. Recommended for those with no prior study of chemistry. Corequisite: MATH 0003, MATH 0013, or MATH 1023. (F, S, SU)

1011. Laboratory for General Chemistry I Three hours per week. (Credit for this course is contingent upon earlier or simultaneous completion of CHEM 1013.) (F, S, SU)

1013. General Chemistry I Study of chemical reactions and equations, periodic relationships, the gaseous state, and the fundamentals of atomic theory, quantum theory, electronic structure, chemical bonding, stoichiometry and thermochemistry. Corequisite: MATH 0013 or MATH 1023. Prerequisite: CHEM 1003 or high school chemistry strongly recommended. (F, S, SU)

1021. Laboratory for General Chemistry II Three hours per week. Corequisite or prerequisite: CHEM 1023. Prerequisite: CHEM 1011 (Credit for this course is contingent upon earlier or simultaneous completion of CHEM 1023.) (F, S, SU)

1023. General Chemistry II Study of liquids, solids, solutions and the fundamentals of chemical kinetics, chemical equilibria, acids and bases, thermodynamics, and electrochemistry. Prerequisites: CHEM 1011 and CHEM 1013. (F, S, SU)

1031. Laboratory for Introduction to Organic and Biochemistry Three hours per week. (Not open to chemistry majors.) Prerequisites: CHEM 1011 and CHEM 1013. Corequisite: CHEM 1033. (F, S, SU)

1033. Introduction to Organic and Biochemistry Emphasis on applications to body functions. Lecture three hours, laboratory three hours. (Not open to chemistry majors.) Prerequisite: CHEM 1011 and CHEM 1013. (F, S, SU)

2004. Descriptive Inorganic Chemistry Systematic study of the chemistry of the elements with problem solving using microcomputers. Lecture four hours per week. Prerequisite: CHEM 1021 and 1023. (F)

3054. Quantitative Analysis Emphasizes quantitative analysis based on wet-chemical methods and modern instrumentation. Topics include statistics, gravimetry, acid-base, redox and complex ion equilibria, absorptiometry and electroanalytical methods. Lecture two hours, laboratory six hours per week. Prerequisites: CHEM 1021 and 1023. (S)

3101. Laboratory for Organic Chemistry I Laboratory skills illustrating the principles of Organic Chemistry I. Three hours per week. Corequisite or prerequisite: CHEM 3103 (credit for this course is contingent upon earlier or simultaneous completion of CHEM 3103). (F, S, SU)

3103. Organic Chemistry I Study of the nomenclature, bonding, preparations and reactions of compounds of carbon, including alkyl and aromatic hydrocarbons, haloalkanes, alcohols, and ethers. Lecture three hours per week. Prerequisites: CHEM 1023 and CHEM 1021. (F, S, SU)

3111. Laboratory for Organic Chemistry II Laboratory skills illustrating the principles of Organic Chemistry II. Three hours per week. Prerequisite: CHEM 3101 (credit for this course is contingent upon earlier or simultaneous completion of CHEM 3113). (F, S, SU)

3113. Organic Chemistry II Continuation of Organic Chemistry I, including the study of phenols, aldehydes, ketones, carboxylic acids and their derivatives, amines, proteins, carbohydrates, lipids and nucleic acids. Spectroscopic methods of structure determination are also presented. Lecture three hours per week. Prerequisite: CHEM 3103. (F, S, SU)

3121. Laboratory for Physical Chemistry I The laboratory associated with CHEM 3123. Three hours per week. Corequisite: CHEM 3123. (F)

3123. Physical Chemistry I Systematic, rigorous development of the fundamental ideas in chemistry. Lecture three hours per week. Chemistry majors required to take CHEM 3121 as corequisite. Prerequisites: MATH 2204 or six credit hours of physics. (F)

3131. Laboratory for Physical Chemistry II The laboratory associated with CHEM 3133. Three hours per week. Corequisite: CHEM 3133. (S)

3133. Physical Chemistry II Continuation of CHEM 3123. Lecture three hours per week. Chemistry majors required to take CHEM 3131 as corequisite. Prerequisites: CHEM 3123 and MATH 2214. (S)

3143. Physical Chemistry for the Biological Sciences Systematic development of the fundamental physical principles that underlie chemistry and application of these principles to the biological sciences. Prerequisite: MATH 2194; PHYS 2044 or PHYS 2064; and CHEM 3113. (S)

4043. Environmental Chemistry An overview of the chemistry of natural waters, soils, and the atmosphere. Emphasis will be on the chemical and biological agents which affect the quality of the environment. The most commonly used analytical techniques and quality assurance/control procedures will be covered. Prerequisites: CHEM 3103 and CHEM 3101. (F -even)

4053. Geochemistry An overview of the chemistry of terrestrial materials. Emphasis will be on the chemical processes which formed and have changed the Earth. Prerequisite: CHEM 3133 (S -even)

4204. Inorganic Chemistry Includes the recent concepts of bonding and molecular structure as well as some of the less common chemistry of the elements. Lecture three hours, laboratory three hours per week. Prerequisites: CHEM 3121 and CHEM 3123. (S)

4224. Instrumentation Application and operational theories of modern instruments. Laboratory includes use of gas chromatography; infrared, ultraviolet-visible and atomic absorption, spectroscopy, and electrochemical techniques. Lecture two hours, laboratory six hours per week. Prerequisites: CHEM 3054, CHEM 3121, and CHEM 3123. (F)

4232. Chemical Literature Systematic study of chemical literature and its use in the chemistry profession. (S)

4241. Laboratory for Biochemistry Experiments aimed to acquaint the student with problems and more important methods of biochemical research. Laboratory three hours per week. Corequisite: CHEM 4243. (F)

4243. Biochemistry Presentation of the important areas of modern biochemistry and a description of methods commonly employed in biochemical research. Lecture three hours per week. Prerequisites: CHEM 3113 and 3111. (F)
4263. Radiochemical Techniques Radioactivity and its uses as related to chemical, physical, and geological problems. Lecture two hours, laboratory three hours per week. Prerequisites: CHEM 3131 and 3133. (F-odd)

4271-2-3. Research in Chemistry Directed study in some specialized phase of chemistry designed to provide experience in independent investigations. Prerequisite: permission of the Chemistry Department's Independent Studies Committee. (F, S, SU)

4281. Chemistry Seminar Critical discussion, preparation, and presentation of papers on current topics in chemistry. Chemistry majors are required to take this course in their senior year. Prerequisite: CHEM 4232. (F, S)

Physical Science (PHSC) (Special course fees may apply.)

1201. Laboratory for Physical Science Two hours per week. To be taken concurrently with PHYS 1203. (F, S, SU)

1203. Physical Science The relationship of man to his physical world; content of the course is centered on the development of our modern concepts about matter and energy and how this development is related to the social order of which man is a part. Lecture three hours. (This course does not satisfy science certification for secondary school teachers. It is not accepted as a major requirement in any natural science field.) To be taken concurrently with PHYS 1201. Prerequisite: MATH 0013 or ACT Mathematics score of 14. (F, S, SU)

General Science (GSP) (Special course fees may apply.)

3203. Science in the Elementary Classroom Gives elementary school teachers an overall view of the role of science in the development of modern civilization, and enables elementary teachers to properly direct the learning activities of pupils in the science classes of the elementary school. Prerequisites: BIOL 1001, 1003, and PHSC 1203 and 1201. (F, S, SU)

3213. Glassworking Manipulation of solid glass rods and glass tubing into finished products, including the making of novelty glass items; and the building and repairing of scientific glassware. (D)

Geology (GEOL)

1001. Environmental Geology Laboratory Two hours per week. Laboratory exercises in environmental aspects of the geosciences. To be taken concurrently with GEOL 1003.

1003. Environmental Geology A survey of fundamental geologic processes and associated hazards (earthquakes, volcanic eruptions, floods, etc.) and the interactions of humans with the environment. Lecture three hours. Prerequisite: MATH 0013 or ACT mathematics score of 16. (F, S)

1014. Historical Geology History and sequence of development of the earth and its inhabitants, including an introduction to the taxonomy and morphology of common fossils from plant and animal kingdoms. Lecture three hours, laboratory two hours per week. (S)

4333/5333. Hydrogeology A discussion of the hydrologic cycle with emphasis on groundwater occurrence and flow. Topics addressed include precipitation and groundwater recharge, aquifer characteristics, well production and well tests, regional flow, groundwater contamination and monitoring, and groundwater geology and geography.

Physics (PHYS) (Special course fees may apply.)

1101. Laboratory for Introduction to Space Science Two hours per week. To be taken concurrently with PHYS 1103. (F, S)

1103. Introduction to Space Science A survey of the basic principles of science with emphasis on physics through their application to man's study about his place in the cosmos. Lecture three hours. To be taken concurrently with PHYS 1101. (This course will meet the general education requirements for physics science.) Prerequisite: MATH 0013 or ACT Math score of 16. (F, S)

2034. University Physics I Basic principles of mechanics, thermodynamics, materials and wave motion utilizing calculus with multimedia computers (at each station) in a unified lecture/lab format. 6 hours per week. Corequisite: MATH 2214. Prerequisite: Physics 2034 or 2033 and 2051. This course may be substituted for PHYS 2053 and 2051. (This course will meet the General Education Requirements for Physical Science.) (F, S, SU)

2044. University Physics II Continuation of PHYS 2034 covering the basic principles of electricity, magnetism, waves, optics and topics from modern physics utilizing calculus with multimedia computers (at each station) in a unified lecture/lab format. 6 hours per week. Corequisite: MATH 2214. Prerequisite: Physics 2034 or 2033 and 2051. This course may be substituted for PHYS 2063 and 2061 or for PHYS 2083 and 2081. (F, S, SU)

2054. General Physics I The essential of mechanics, heat, materials and simple harmonic motion in a unified lecture/laboratory format utilizing multimedia computers at each student station. Six hours per week. (This course will meet the General Education Program requirements for physical science). (PHYS 2034 may be substituted). Prerequisite: MATH 1033. (F, S, SU)

2064. General Physics II Continuation of PHYS 2054, the essentials of electricity, magnetism, wave motion, light and modern physics in a unified lecture/laboratory format utilizing multimedia computers at each student station. Six hours per week. (PHYS 2054 may be substituted for this course.) Prerequisite: PHYS 2054 or 2034. (F, S, SU)

2071. Laboratory for Fundamental Physics I Two hours per week. (Credit for this course is contingent upon earlier or simultaneous completion of PHYS 2073.) (F, S, SU)

2073. Fundamental Physics I Basic principles of mechanics, special relativity, thermodynamics, and wave motion utilizing calculus. Lecture three hours per week. Students enrolling in this course should enroll in Laboratory for Fundamental Physics I. Corequisite: MATH 2204. (F, S, SU)

2081. Laboratory for Fundamental Physics II Two hours per week. Prerequisites: PHYS 2071 and 2073 (Credit for this course is contingent upon earlier or simultaneous completion of PHYS 2083.) (F, S, SU)

2083. Fundamental Physics II Continuation of PHYS 2073, covering electricity, magnetism, optics, and modern physics. Lecture three hours per week. Students enrolling in this course should enroll in Laboratory for Fundamental Physics II. Corequisite: MATH 2214. Prerequisites: PHYS 2071 and 2073. (F, S, SU)

2133. Survey of Physics for the Health Professions A survey for introductory mechanics, waves, electricity, magnetism, optics and modern physics with applications for students of the health professions. (SU)

See the ASU web page (www.astate.edu) for current bulletin information.
3052. **Relativity**  
Quantitative introduction to the special theory of relativity with a brief qualitative introduction to general relativity. Prerequisites: PHYS 2044 or 2064 or PHYS 2081 and 2083. (D)

3103. **Thermal Physics**  
The first and second laws of thermodynamics, the kinetic theory of gases, and an introduction to statistical mechanics. Lecture three hours per week. Corequisite: MATH 3254. Prerequisites: PHYS 2044 or 2064. (S -even)

3133. **Astronomy**  
Theories of the origin, development, present state, and future of the universe, with special emphasis on the place of astronomy in man's cultural and scientific development. (F, S, SU)

3153. **Mechanics**  
Particle dynamics in inertial and accelerated reference frames. Newton's law of gravitation, orbit theory, and elementary rigid body dynamics. Lecture three hours per week. Prerequisites: MATH 2214 and PHYS 2044 or 2064. (F)

3203. **Electromagnetic Theory**  
Electrostatics, electric and magnetic properties of materials. Ampere's and Faraday's laws, and Maxwell's equations. Lecture three hours per week. Prerequisites: MATH 3254 and PHYS 2044 or PHYS 2044. (S)

3253. **Optics**  
Geometrical optics and physical optics, including interference, diffraction, dispersion, absorption, and polarization of light. Lecture three hours per week. Prerequisites: MATH 2214 and PHYS 2044 or 2064. (S -odd)

3272. **Physical Instrumentation I**  
Design and use of physical instruments, including data reduction. Laboratory four hours per week. Prerequisites: PHYS 2044 or 2064. (F -odd)

3282. **Physical Instrumentation II**  
A continuation of PHYS 3272, including advanced data reduction techniques. Laboratory four hours per week. Prerequisites: PHYS 2044 or 2064. (S -even)

3303. **Modern Physics**  
An elementary study of the atomic nature of matter and nuclear structure of the atom. Lecture three hours per week. Prerequisites: MATH 2214 and PHYS 2044 or 2064. (F)

3453. **Mathematical Physics**  
The mathematical aspects of classical physics including Newton's laws; Lagrangian and Hamiltonian dynamics; Electrodynamics and Relativity. Lecture three hours per week. Prerequisites: PHYS 3303 and MATH 3254. (F -even)

4040. **Nuclear and Particle Physics**  
Introduction to the structure of the nucleus, nuclear scattering and decay processes, mesons, nucleons, and quarks. Lecture three hours per week. Prerequisite: PHYS 3303. (S -odd)

4432. **Advanced Physics Laboratory I**  
Experiments in classical and modern physics. Laboratory four hours per week. Prerequisites: PHYS 2044 or 2064. (F -even)

4442 **Advanced Physics Laboratory II**  
Continuation of PHYS 4432, including individual student projects. Laboratory four hours per week. Prerequisite: PHYS 2044 or 2064. (S -odd)

4463. **Advanced Mechanics**  
The Lagrangian and Hamiltonian formulations, rigid body mechanics, and special relativity. Prerequisite: PHYS 3153. (S)

4513. **Advanced Electromagnetic Theory**  
Maxwell's equations as applied to waveguides, radiation, and wave propagation in various media. Lecture three hours per week. Prerequisite: PHYS 3203. (F)

4533. **Solid State Physics**  
Introductory study of the structure and physical properties of crystalline solids, including X-ray diffraction, specific heats, free electron theory, and band approximation. Lecture three hours per week. Prerequisite: 20 hours of physics. (D)

4553. **Principles of Quantum Mechanics**  
Solutions of the Schrodinger wave equation, including the harmonic oscillator, the hydrogen atom, and perturbation theory, and associated topics. Lecture three hours per week. Prerequisite: 20 hours of physics. (S -even)

4571. **Physics Seminar**  
Prerequisite: Fourteen hours of physics. (D)

4591-2-3. **Research in Physics**  
Prerequisite: Fourteen hours of physics. (D)

4693. **Research in Physics-Capstone**  
Students will conduct research with a physics faculty member, write a paper and present a talk on their research, and take an exit exam. Physics majors are required to take this course in their senior year. Prerequisite: Twenty hours of Physics. (F, S)

DEPARTMENT OF COMPUTER SCIENCE

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Computer Science (CS)

1043. **Introduction to Computers**  
Applications of computers for general university course work. Elementary operating system usage, creation of data files, spreadsheets for mathematical and scientific data, Internet usage. Corequisite: MATH 0013. (F, S, SU)

2171. **Laboratory for Introduction to Programming**  
Two hours per week. Corequisite: CS 2173.

2173. **Introduction to Programming**  
Introduction to operating systems, programming and simple data structures. Emphasis will be placed on construction of programs. Prerequisite: MATH 1023 or equivalent. Corequisite: CS 2171. (F, S)

2181. **Laboratory for Programming I**  
Two hours per week. Corequisite: CS 2183.

2183. **Programming I**  
First course in programming, emphasis on programming methodology, procedural abstraction, and top-down design. Introduction to string processing, file input/output, recursion, and simple data structures. Prerequisite: MATH 1023 or equivalent. Corequisite: CS 2181. (F, S)

2191. **Laboratory for Programming II**  
Two hours per week. Corequisite: 2193.

2193. **Programming II**  
Second course in programming, emphasis on data abstraction. Introduction to abstract data types. Linked lists, stacks, queues and binary trees. Searching and sorting techniques. Prerequisite: CS 2183. Corequisite: CS 2191. (F, S)

3333. **Assembly Language Programming**  
Basic concepts of computer systems and architecture. Programming and debugging of assembly language programs. Prerequisites: CS 2183 and CS 2181. (F)

3363. **Data Structures**  
Analysis of data structures and associated algorithms. Examination of advanced tree structures, heaps, hashing techniques, and graph algorithms. Prerequisites: CS 2193, CS 2191, MATH 2183, and one of MATH 2204, MATH 2143 or MATH 2194. (F)

3383. **Computer Architecture**  
Basic principles of computer architectural design including instruction set principles, pipelining, instruction level parallelism, memory hierarchy, storage systems, and multiprocessors. Prerequisite: MATH 2204, CS 3333 and ECIE 3333. (F, S)

See the ASU web page (www.astate.edu) for current bulletin information.
3453. Operating Systems  Policies, design issues, and implementation techniques for operating system software. Synchronization, process scheduling, memory and storage management, and system protection. Prerequisite: CS 3333 or CS 3363. (F)

3543. Programming Languages  Survey of organization and behavior of programming languages. Examination of data typing, control structures, syntactic representation and specification. Prerequisites: CS 2192 and CS 2191. (S)

4373. Database Systems  Topics include major database models; relational algebra; data independence and database normalization; entity-relationship model; security, integrity, recovery, and concurrency issues; physical organization of a database. Prerequisite: CS 3363. (F)

4393. Automata Theory  Study formal languages and equivalent models of computation; finite state automata and regular expressions; push-down automata and context-free grammars; pumping lemmas and closure properties; and tutoring machines. Prerequisite: CS 3363. (S -even)

4463. Computer Networks  Issues and principles involved in the design of computer networks using the OSI reference model as a framework. Prerequisite: CS 3453. (S)

4473. Distributed Computing  Study of client-server systems, distributed databases, distributed transaction processing, and distributed applications. Provides overview of recent trends in distributed object technologies. Applications will be designed and constructed using object software architectures. Prerequisites: CS 3363 Data Structures. (SU)

4483. Artificial Intelligence  Representation of knowledge and introduction to functional programming language, search methods and control. Typical applications of artificial intelligence. Prerequisite: CS 3363. (F -odd)

4493. Computer Graphics I  Creation, storage, and manipulation of graphical models, objects, implementation of graphics routines in both two and three dimensional techniques. Prerequisite: CS 3363. (F -even)

4503. Computer Graphics II  Continuation of Computer Graphics I. Techniques for realistic solid modeling. Topics include hidden surface removal, shading, shadowing, reflection, refraction, and color theory. Prerequisite: CS 4493. (S -odd)

4523. Software Engineering I  Techniques of design, implementation, automated tools, quality assurance, metrics, and maintenance for large scale software systems. Projects include team programming experience. Prerequisite: CS 3363. (F)

4531. Computer Science Seminar  Critical discussion and presentation of papers on current topics in computer science. The prerequisites will vary according to the topic selected, but all students must have taken CS 3363. (D)

4533. Software Engineering II  Continuation of Software Engineering I. Projects will provide team programming experience. Prerequisite: CS 4523. (S)

4541-3. Internship  Supervised work experience participating in application system development in a business/manufacturing environment. Grade earned will be pass or fail. Prerequisites: Permission of the Computer Science faculty and CS 3363. (D)

4571-2-3. Special Problems in Computer Science  Individual problems or topics in computer science arranged in consultation with the instructor (Must be approved by the department.) Prerequisite: CS 3363. (D)

4583. UNIX Systems Programming  System-level programming in UNIX systems. Prerequisite: CS 3363. (S -odd)

4703. Analysis of Algorithms  Analysis of space and time requirements of algorithms. Worst-case and average-case studies. Greedy algorithms and divide-and-conquer algorithms. Tractable and intractable algorithms. Prerequisites: CS 3363 and MATH 2214. (F -odd)

4793. Compilers  Techniques for construction of compilers. BNF and EBNF representations. Lexical, syntactic and semantic analysis. Top-down and bottom-up parsing. Run-time systems and code generation. Prerequisite: CS 3363. (S -even)

DEPARTMENT OF MATHEMATICS AND STATISTICS

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The University reserves the right to change course scheduling when circumstances dictate such changes.

Mathematics (MATH)

0003. Developmental Algebra  (Credit not applicable toward a degree.) Real numbers, inequalities, linear equations, exponents, polynomials, and rational expressions. A grade of "C" or better must be made in this course before enrolling in MATH 0013. Prerequisite: MATH ACT of 16. (F, S, SU)

0013. Intermediate Algebra  (Credit not applicable toward a degree) Exponents, radicals, polynomials, rational expressions, linear equations, functions, graphs, factoring, introduction to quadratic equations, and related topics. A grade of "C" or better must be made in this course before enrolling in MATH 1023, or MATH 1054. Prerequisite: High School Algebra I and math ACT of 17 or 18, or a "C" or better in MATH 0003. (F, S, SU)

1023. College Algebra  Equations and inequalities, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities, matrices, and miscellaneous topics. (No credit given if taken following MATH 1054.) Prerequisite: High School Algebra II and score of 19 or above on math ACT or 590 or above on SAT, or a grade of "C" or better in MATH 0013. (F, S, SU)

1033. Plane Trigonometry  Right triangles and similar triangles, trigonometric ratios, degrees, and radians, trigonometric functions, circular functions, trigonometric identities, inverse trigonometric functions, trigonometric equations, Law of Sines, Law of Cosines, vectors, polar coordinates, and complex numbers. (No credit given if taken following MATH 1054.) Prerequisite: High School Algebra II and score of 19 or above on math ACT or 590 or above on SAT, or a grade of "C" or better in MATH 0013 or Corequisite: MATH 1023. (F, S, SU)

1054. Precalculus Mathematics  Selected topics from algebra, trigonometry, and analytic geometry. Prerequisite: High School Algebra II and score of 22 or above on math ACT or 630 or above on SAT, or MATH 1023. (F)

2113. Mathematics for School Teachers I  Sets, logic, and numbers with emphasis on the axiomatic development of the real numbers. (For elementary education majors only) Prerequisite: with a "C" or better in MATH 1023. (This course may not be used to satisfy general education mathematics requirement.) (F, S)

2123. Mathematics for School Teachers II  Mathematical systems, elementary algebra, probability and statistics, and geometry with applications. Prerequisite: MATH 2113. (This course may not be used to satisfy general education mathematics requirement.) (F, S)

See the ASU web page (www.astate.edu) for current bulletin information.
2143. Business Calculus  Exponential functions, mathematics of finance; systems of linear equations, linear inequalities and linear programming; limits, derivatives, and integrals; business calculus applications including marginal analysis, extrema and concavity of functions of one and several variables. (Will not satisfy requirements for mathematics degrees.) Prerequisite: MATH 1023 or MATH 1054 or a mathematics ACT score of 24 or an SAT score of 660. (F, S, SU)

2183. Discrete Structures  Topics include sets and functions, partially ordered sets, trees and graphs, algorithms, symbolic logic, Boolean algebra, combinatorics, and probability modeling. Prerequisites: High School Algebra II and score of 22 or above on math ACT of 630 or above on SAT, or MATH 1054. (F, S, SU)

2194. Survey of Calculus  Survey of the basic concepts of calculus, including limits, derivatives, exponential and logarithmic functions, integrals, and series and sequences. (Credit will not be given for both MATH 2194 and MATH 2204.) Prerequisites: MATH 1023 or MATH 1054. (S)

2204. Calculus I  Limits, derivatives, implicit differentiation, applications of the derivative, indefinite integrals, definite integrals, substitution techniques for integrals and applications of the integral. Prerequisites: High School Trigonometry and score of 24 or above on math ACT or 660 or above on SAT, or MATH 1023 and MATH 1033 or MATH 1054. (F, S, SU)

2214. Calculus II  Inverse trigonometric functions, hyperbolic functions, integration by parts, trigonometric substitution, partial fractions, integral tables, approximating definite integrals, Taylor's Theorem, L'Hospital's Rule, improper integrals, sequences, series, power series, Taylor series, parametric curves, arc length, surface area and polar coordinates. Prerequisite: MATH 2204. (F, S, SU)

3243. Linear Algebra  Introduction to vector spaces, with application to matrix theory. Prerequisite: MATH 2214. (S, SU)

3254. Calculus III  Vectors, lines, and planes in two and three dimensions, vector-valued functions, space curves, curvature and torsion, partial and directional derivatives, extrema of functions of several variables, optimization problems, double and triple integrals with applications, cylindrical and spherical coordinates, vector fields and line integrals, Green's Theorem and the divergence theorem. Prerequisite: MATH 2214. (F, S, SU)

3273. Applied Complex Analysis  Survey of complex analysis with emphasis on developing skills needed for applications. Prerequisite: MATH 3254. (F -even)

3303. Modern Algebra I  Introduction to the theory of groups, rings, modules, and vector spaces, with emphasis on applications to the real number system. Prerequisite: MATH 2214. (F)

3323. Mathematical Modeling  Construction of mathematical models for use with problems in the mathematical sciences, operations research, engineering and the management and life sciences. Prerequisite: MATH 2214. (S)

3343. College Geometry  Geometric transformations and invariants. Prerequisite: MATH 2214. (S, SU)

3353. History of Mathematics  Origin and development of modern mathematical concepts. Topics include systems of numeration, algebra, geometry, calculus, and the foundations of the real number system. Prerequisite: MATH 2214. (F, SU -odd)

4403. Differential Equations  Topics in the elementary theory of differential equations, including existence theorems. Prerequisite: MATH 3254. (F, S)

4423. Modern Algebra II  Continuation of MATH 3303. Prerequisite: MATH 3303. (S)

4513. Applied Mathematics  Topics from ordinary and partial differential equations, including existence theorems. Prerequisite: MATH 3254. (F -even)

4533. Numerical Methods  Algebraic, transcendental, ordinary and partial differential equations, finite differences, and integral equations. Numerical integration, error analysis, and/or other topics of numerical analysis utilizing high speed computer techniques. Prerequisites: MATH 2214 and CS 2163 or 2183. (F -odd)

4553. Advanced Calculus I  The calculus of one and of several variables. Limits, continuity, sequences, differentiation, partial differentiation, integration, and infinite series. Prerequisite: MATH 3254. (F, SU -even)

4563. Advanced Calculus II  Continuation of MATH 4553. Prerequisite: MATH 4553. (S, SU -even)

4581. Mathematics Seminar  Prerequisite: MATH 3303. (D)

4591-2-3. Special Problems in Mathematics  Prerequisite: MATH 3303. (D)

Statistics (STAT)

3233. Applied Statistics  Topics include descriptive statistics, probability, Bayes' Rule, the normal distribution and related sampling distributions, point estimation, interval estimation, hypothesis testing, chi-square goodness-of-fit test, simple linear regression, and analysis of variance. Introductory statistics for students in the biological, physical, social sciences and health professions. Prerequisite: MATH 1023 or equivalent. (F, S, SU)

4453. Probability and Statistics I  Probability spaces, random variables, probability distributions, independence, conditioning, probability laws, sampling theory, and associated topics. Prerequisite: MATH 3254. (F)

4463. Probability and Statistics II  Point and interval estimation, testing hypotheses, standard statistical tests, correlation and regression, and non-parametric methods. Prerequisite: STAT 4453. (S -odd)

4473. Data Analysis  Topics include simple linear regression, multiple linear regression, and analysis of variance (ANOVA). Prerequisite: STAT 3233 or equivalent. (S -even)
Department of Military Science and Leadership

The faculty of the Department of Military Science at Arkansas State consists of: A Professor of Military Science (usually a Lieutenant Colonel); Three Assistant Professors (usually a Major and two Captains); and Two Instructors (usually a Master Sergeant and a Sergeant First Class). Their tours with the department last from two to three years.

GENERAL INFORMATION

The Army Reserve Officers’ Training Corps (ROTC), is a series of elective college courses, taken in conjunction with a full load of academic courses, which can lead to a commission as a second lieutenant in either the United States Army, United States Army Reserve or the U.S. Army National Guard. Participation in ROTC provides instruction in leadership and management and helps students develop self-discipline, physical stamina, and confidence. The ROTC program augments the University’s objectives by emphasizing academic excellence and the development of personal integrity, honor, and responsibility. Upon commissioning, graduates will serve in the active Army, The United States Army Reserve, or the Army National Guard. Selection for active duty is based on the needs of the service, the individual’s preference, and the individual’s performance record. Almost any branch is available for those commissioned in the reserve forces (barring physical limitations).

ROTC PROGRAM

We have three paths for completion of our program which lead to a commission in the U.S. Army:

1. The first path is completion of both MSL I and MSL II level courses (The Basic Course), followed by completion of the Advanced Program.
2. The second path is completion of any U.S. Armed Forces Basic Training, followed by completion of the Advanced Program.
3. The third path is completion of ROTC Leaders Training Course, followed by completion of the Advanced Program.

The Basic Course

Further defined: Physically able students, male or female, may enroll in the Basic Course without incurring a military obligation. The ROTC Basic Course consists of four courses designed to be taken one each semester during the freshman and sophomore years. No more than two courses may be taken simultaneously without the approval of the Professor of Military Science (PMS). All textbooks are provided at no charge.

U.S. Armed Forces Basic Training

Credit for completion of the basic course is granted for anyone who successfully completes Basic Training in the Army, Air Force, Marine Corps, or the Navy, whether it was active component, guard, or reserve. If Advanced Individual Training is also completed, six hours of elective credit may be available from the university.

Leaders Training Course

The university will grant up to six hours of elective credit for successful completion of the ROTC Leaders Training Course. Camp consists of practical experience and instruction in tactical and technical military subjects with emphasis on leadership development. The course is four weeks in length and is conducted at Fort Knox, Kentucky. Students are paid for attendance (about $600), and provided travel to and from campus. Housing, uniforms, and meals are provided at no expense. Students attending the Leaders Training Course do incur a military service obligation.

See the ASU web page (www.astate.edu) for current bulletin information.
THE ADVANCED COURSE

The ROTC Advanced Course consists of four courses designed to be taken one each semester during the junior and senior years (or graduate school). Students must attend the Leader Development and Assessment Course (LDAC) between their MSL III and MSL IV year. Upon entry into the Advanced Course, a student must sign a contract recognizing a service obligation. The obligation may be served in either the reserve components (Reserve Component duty can be guaranteed) or the Active Army (depending on the needs of the Army). Cadets in the Advanced Course receive textbooks, uniforms, and a nontaxable subsistence allowance (10 months per year), as well as pay for attending the LDAC. Prerequisites for admission to the Advanced Course are:

1. Completion of the Basic Course, the Leaders Training Course, or U.S. Armed Forces Basic Training.
2. Physical qualification determined by medical examination.
3. Selection by Professor of Military Science.
4. Under 32 years of age (may be waived in certain cases).
5. Pass a screening evaluation.
6. At least two academic years remaining before graduation or be enrolled in graduate school.
7. A grade point average of 2.00 or better for all college work and completion of at least sixty semester hours of college work. Applicants will normally be required to have achieved "junior" academic status.

In addition to the Military Science and Leadership courses, advanced course students must complete professional military education courses in the fields of Written Communication, Computer Literacy, Mathematical Reasoning, Human Behavior, and Military History. The Communication, Human Behavior, and Mathematical Reasoning requirements are normally met by the General Education Courses offered by the university. The Military History requirement must be met by completing one of several history classes offered. Specific course requirements will be prescribed by the PMS, based on a review of the student's enrollment into the advanced course. Field Training Exercises will be conducted to provide practical experience as required to supplement classroom training.

FINANCIAL ASSISTANCE

1. ROTC Scholarships:
   In addition to four-year Army ROTC scholarships which are awarded to high school seniors, two- and three-year Army ROTC scholarships are available to college freshmen and sophomores on a competitive basis. Applicants are judged on their potential and aptitude for military service and are evaluated by an academic board chaired by the Professor of Military Science (PMS). ROTC scholarships cover the cost of university tuition, textbook, laboratory fees, and a subsistence allowance for each school month depending on the number of hours completed by the student. High school students applying for four-year scholarships must have their packets completed by 15 November of their senior year. Three-year and two-year scholarship applications must be completed by the spring semester, prior to the first school year of the scholarship.

2. Subsistence Allowance:
   A monthly monetary allowance of $350-$400 for each school month is paid to students enrolled in the Advanced Course. During the ROTC LDAC, the student is paid approximately $700 for the 35 day camp period and provided travel to and from camp. Housing, uniforms, and meals are furnished at no expense to the cadet. The course is conducted at Fort Lewis, Washington.

3. Simultaneous Membership Program (SMP):
   Individuals may enroll in the Military Science and Leadership Advanced Course while retaining membership in the Army National Guard or Army Reserve. Those wishing to serve in the Army National Guard or Army Reserve during enrollment in the Military Science and Leadership Advanced Course may do so except in certain cases. In addition to receiving cadet monthly subsistence, these individuals also receive pay (E5 or higher, from previously held grade) from their Army National Guard or Army Reserve unit and qualify for the Montgomery GI Bill benefits.

DEPARTMENT OF MILITARY SCIENCE AND LEADERSHIP COURSE DESCRIPTIONS

The frequency of course offering is indicated following each course description. If not otherwise indicated, the course will be scheduled for each enrollment period. The university reserves the right to change course scheduling when circumstances dictate such changes.

Military Science and Leadership (MSL)

BASIC COURSES

1011. (1 001 1) Foundations of Officership
   Examines the unique duties and responsibilities of officers. Discuss organization and role of the Army. Review basic life skills pertaining to fitness and communication. Analyze Army values and expected ethical behavior. Also required—leadership lab and optional (but encouraged) participation in 1-hour physical fitness session. (F, S)

1021. (1 002 1) Basic Leadership
   Presents fundamental leadership concepts and doctrine. Practice basic skills that underlie effective problem solving. Apply active listening and feedback skills. Examine factors that influence leader and group effectiveness. Examine the officer experience. Also required—leadership lab and optional (but encouraged) participation in 1-hour physical fitness session. (F, S)

2032. (2 003 2) Individual Leadership Studies
   Develops knowledge of self, self-confidence and individual leadership skills. Develop problem solving and critical thinking skills. Apply communication, feedback and conflict resolution skills. Participation in weekend exercises is optional for those students not on ROTC scholarship. Prerequisites: both MSL I courses. (F)

2042. (2 004 2) Leadership and Teamwork
   Focuses on self-development guided by knowledge of self and group processes. Challenges current beliefs, knowledge, and skills. Provides equivalent preparation for the ROTC Advanced Course and the Leaders Training Course. Participation in weekend exercises is optional for those students not on ROTC Scholarship. Prerequisites: both MSL I courses. (S)

2102. (1 181 1-2) Military History
   Special topics in military history. Instructor approval required. Prerequisites: both MSL I courses. (F, S)

2091. (2 009 1-6) Leaders Training Course
   A four-week summer camp conducted at Fort Knox, Kentucky. The student receives pay. Travel, lodging, and most meal costs are paid by the Army. The environment is rigorous, and in some ways similar to Army Basic Training. Open only to students who have not taken all of the basic course completion requirements, and who pass a physical examination (paid for by ROTC). Completion of basic camp qualifies a student for entry into the Advanced Course. Five different cycles are offered during the summer, but spaces are limited by the Army. Candidates can apply for a space any time during the school year prior to the summer. Arkansas State University will grant up to six hours of elective credit for successful completion of the ROTC Basic Camp. (SU)

See the ASU web page (www.astate.edu) for current bulletin information.
ADVANCED COURSES

A prerequisite for entrance into the Advanced Course is completion of the four courses in the Basic Course, or completion of the ROTC Leaders Training Course or completion of Basic Training.

3053. (3 005 3) Leadership and Problem Solving Examines basic skills that underlie effective problem solving. Analyze the role officers played in the transition of the Army from Vietnam to the 21st Century. Review the features and execution of the Leadership Development Program. Analyze military missions and plan military operations. Execute squad battle drills. (F)

3063. (3 006 3) Leadership and Ethics Probes leader responsibilities that foster an ethical command climate. Develop cadet leadership competencies. Prepare for success at ROTC National Advanced Leadership Camp. Recognize leader responsibility to accommodate subordinate spiritual needs. Apply principles and techniques of effective written and oral communication. (S)

4073. (4 007 3) Leadership and Management Builds on National Advanced Camp experience to solve organizational and staff problems. Discuss staff organization, functions, and processes. Analyze counseling responsibilities and methods. Examine principles of subordinate motivation and organizational change. Apply leadership and problem solving principles to a complex case study/simulation. (F)

4083. (4 008 3) Officership Capstone course designed to explore topics relevant to second lieutenants entering the Army. Describe legal aspects of decision making and leadership. Analyze Army organization for operations from the tactical to strategic level. Assess administrative and logistics management functions. Discuss reporting and Permanent Change of Station (PCS) process. perform platoon leader actions. Examine leader responsibilities that foster an ethical command climate. (S)

LEADERSHIP DEVELOPMENT

Military Science students are required to participate in a Leadership Laboratory in addition to classroom requirements. Training consists of military drill and ceremonies, field exercises, simulated leadership problems, and familiarization with Army weapons and equipment.

Minor in Military Science and Leadership

A minor in Military Science and Leadership can be granted only to those students who qualify for enrollment in the Advanced Course and subsequent commissioning as an officer in the U.S. Army.

Requirements

Sem. Hrs

A. *Basic Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSL 1011, Foundations of Officership</td>
<td>1 hr</td>
</tr>
<tr>
<td>MSL 1021, Basic Leadership</td>
<td>1 hr</td>
</tr>
<tr>
<td>MSL 2032, Individual Leadership Studies</td>
<td>2 hrs</td>
</tr>
<tr>
<td>MSL 2042, Leadership and Teamwork</td>
<td>2 hrs</td>
</tr>
</tbody>
</table>

TOTAL 6 hrs

B. Advanced Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSL 3053, Leadership and Problem Solving</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MSL 3063, Leadership and Ethics</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MSL 4073, Leadership and Management</td>
<td>3 hrs</td>
</tr>
<tr>
<td>MSL 4083, Officership</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

TOTAL 12 hrs

C. Military History Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSL 4083, Officership</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

TOTAL 2-3 hrs

TOTAL 20-21 hrs

*Items B and C are the only requirements for students who enter the Advanced Course because they have been credited for the Basic Course by attendance at the Leaders Training Course or Basic Training, thus requiring only a total of 15 hours.

Library and Information Resources

Dr. George C. Grant, Dean of Library Information Resources


PURPOSE

The Dean B. Ellis Library is a teaching library. We are directly involved in advancing the teaching, research and service missions of the university. With the adoption of this mission statement, the role of the library expanded from being a passive location for a collection of books and journals, to providing library faculty who actively teach students how to effectively use information resources. This includes accessing, selecting, evaluating, and using information tools in a variety of formats, including print, multimedia, and electronic. Library and Information Resources courses offer students the opportunity to develop information skills that will help them be successful in other academic courses, make informed decisions, and be productive members of society.

LIBRARY AND INFORMATION RESOURCE COURSE DESCRIPTIONS

LIR 1011. Introduction to Using Electronic Information Resources Students will learn strategies for effective information research, including: formulating searches; comparing and contrasting electronic and traditional resources; evaluating various tools for quality; and selecting and using appropriate resources. Prerequisite: None. (F, S)
Center for Regional Programs
Verlene Ringgenberg, Dean
Mike Bowman, Director of Compressed Video Network

MISSION STATEMENT
The mission of the Center for Regional Programs is to extend the resources of Arkansas State University to meet educational needs and to provide public service for the citizens. The Center for Regional Programs works closely with the colleges of the university and communities in Arkansas so the resources and programs of Arkansas State University are responsive to the needs of the region and the state. To accomplish this mission, the center provides off-campus credit programs and courses, independent study credit courses, workshops on campus, non-credit courses, and personal enrichment courses for public services.

BACHELOR OF SCIENCE IN COMPUTER APPLICATIONS
The Bachelor of Science degree in Computer Applications is offered at designated off-campus locations. The entire degree may be earned at the designated location. The computer applications degree program was designed to address the increasing emphasis on information processing. Businesses and industries of various sizes employ or contract with individuals who maintain computer systems and who can function as applications programmers. The computer applications program blends business administration theory and practice with the art and science of computer programming to prepare individuals to function in the business or industrial environment. This diversified curriculum allows students to pursue a wide variety of computer-related careers.

ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAMS
Associate in Applied Science degrees are offered in cooperation with Arkansas State University Technical Center which is located at Marked Tree, Arkansas. The degrees earned by students represent a cooperative program between Arkansas State University and Arkansas State University Technical Center. These programs are designed to articulate with Arkansas State University’s baccalaureate program in technology; These degree programs are not transferable degrees. A student pursuing one of the degrees in Automotive Services Technology, Business Technology, Digital Electronics or Paramedics will complete the General Education courses from Arkansas State University and the technical courses from Arkansas State University Technical Center. Students who are pursuing these degrees must meet the university admission requirements as outlined in this bulletin.

COMPRESSED VIDEO NETWORK
Arkansas State University offers classes through compressed video interactive television. Compressed video allows for two-way, synchronous interaction between multiple sites. ASU-Beebe, ASU Mountain Home, Mid-South Community College in West Memphis, Arkansas Northeastern College in Blytheville, and Ozarka Technical College in Melbourne participate in day, night, and weekend classes offered by several departments at Arkansas State University-Jonesboro.

ARKANSAS STATE UNIVERSITY DEGREE CENTERS
Arkansas State University has partnerships with five community colleges and one technical college to provide various degrees on those college sites. The Center for Regional programs is the administering unit for those degree centers. Any questions concerning the following sites may be directed to 870-972-3052.

East Arkansas Community College degrees offered are B.A. Criminology - B.S. Business Administration - B.S.E. Early Childhood Education (P-4 Level) - B.S.N. Nursing (RN/BSN Trans.) - M.S.E. Curriculum and Instruction - M.S.E. Educational Leadership.

See the ASU web page (www.astate.edu) for current bulletin information.
Arkansas Northeastern College (formerly Mississippi County Community College) degrees offered are B.S. Business Administration - B.S. Manufacturing-Industrial Technology - B.S.E. Early Childhood Education (P-4 Level) - B.S.N. Nursing (RN/BSN Trans.) - M.S.E. Curriculum and Instruction - M.S.E. Educational Leadership - M.S.E. Elementary Administration.

Mid-South Community College degrees offered are B.S. Business Administration - B.S.E. Early Childhood Education (P-4 Level) - B.S.N. Nursing (RN/BSN Trans.) - B.S. Radiologic Science - M.B.A. Business - M.S.E. Curriculum and Instruction - M.S.E. Educational Leadership - M.S.N. Nursing.

Arkansas State University-Bebee degrees offered are A.A.S.N. Nursing (LPN/RN Trans.) - B.S. Agriculture - B.S. Business Administration - B.S. Clinical Laboratory Science - B.S. Manufacturing-Industrial Technology - B.S.E. Early Childhood Education (P-4 Level) - B.S.E. Mid-Level Education (4-8) - M.B.A. Business - M.S.E. Curriculum and Instruction - M.S.E. Educational Leadership.

Arkansas State University Mountain Home degrees offered are A.A.S.N. Nursing (LPN/RN Transition) - A.A.S.N. Nursing - B.A. Criminology - B.S. Business Management - B.S. Radiologic Science - B.S.E. Early Childhood Education (P-4 Level) - B.S.E. Mid-Level Education (4-8) - M.B.A. Business - M.S.E. Curriculum and Instruction - M.S.E. Educational Leadership - Ed.S. Educational Leadership.

Ozarka Technical College degrees offered are A.A.S.N. Nursing (LPN/RN Transition).

OFF-CAMPUS CREDIT COURSES

Credit courses are offered on an intermittent basis in many communities throughout Arkansas. Course selection is determined by the needs of a community. A limited number of off-campus credit hours may be applied to any given degree. See pages describing degree for specific information.

INDEPENDENT STUDY THROUGH CORRESPONDENCE

The center provides many Independent-Study-Through-Correspondence courses. These courses have been specifically designed to allow students to complete the courses without coming to the campus. If the courses are appropriate to a degree, students may apply 31 semester hours of Independent Study credit toward a baccalaureate degree.

PERSONAL ENRICHMENT

Classes that add value to personal development and provide a cultural outlet to area residents are provided by the Center for Regional Programs.

Bachelor of Science

Major in Computer Applications

<table>
<thead>
<tr>
<th>General Education Requirements:</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>See General Education Curriculum for Baccalaureate Degrees, pages 78 and 79</td>
<td>46-49</td>
</tr>
</tbody>
</table>

Major Requirements:

- ACCT 2003 and 2013, Principles of Accounting I and II ........................................... 6
- CA 2003, Introduction to Computing/BASIC ................................................................. 3
- CA 3633, FORTRAN/Programming/Applications ....................................................... 3
- CA 3033, Principles of Computer Electronics ............................................................. 3
- CA 3643, COBOL Programming/Applications ............................................................ 3
- CA 3063, RPG Programming/Applications ............................................................... 3
- CA 4023, Computer Systems Analysis and Design .................................................... 3
- CA 4043, Data Base Systems Applications ............................................................... 3
- CA 4053, COBOL Programming/Applications II ....................................................... 3
- CA 4063, Computer/Organization and Architecture .................................................. 3
- CA 4073, Systems Programming/Applications .......................................................... 3
- CA 4083, Computer/Center Operations ..................................................................... 3
- ECON 2313 and 2323, Principles of Macroeconomics and Principles of Microeconomics 3-6
- ENG 3043, Technical Writing .................................................................................... 3
- MATH 1023, College Algebra ..................................................................................... 3
- MATH 2143, Mathematics with Applications in Business and Economics ............. 4
- MGMT 3123, Organizational Management ................................................................ 3
- MGMT 3523, Operations Management ................................................................... 3
- SSCI 3203, Business and Professional Speech Communication ........................... 3
- STAT 3223, Applied Statistics .................................................................................. 3
- TECH 4113, Operations Systems Research .............................................................. 3

Total 92

*ECON 2313 required here only if not taken as General Education requirement.

Electives: 13-10

Associate in Applied Science

Major in Automotive Service Technology

General Education Requirements:

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1003, Composition I ........................................................................................ 3</td>
</tr>
<tr>
<td>ENG 1013, Composition II ....................................................................................... 3</td>
</tr>
<tr>
<td>Natural Science Elective with Lab ........................................................................ 4</td>
</tr>
<tr>
<td>SSCI 2213, Principles of Sociology OR PSY 2013, Introduction to Psychology ....... 3</td>
</tr>
<tr>
<td>HIST 2763, United States History Since 1876 OR HIST 2773, United States History Since 1876 OR POSC 2103, Introduction to United States Government .... 3</td>
</tr>
<tr>
<td>MATH 1023, College Algebra .................................................................................. 3</td>
</tr>
<tr>
<td>PE 1002, Concepts of Fitness ................................................................................ 2</td>
</tr>
<tr>
<td>Fine Arts or Humanities Elective ........................................................................... 3</td>
</tr>
<tr>
<td>BUS 1303, Computer Applications for Business .................................................. 3</td>
</tr>
</tbody>
</table>

Total 26-27

Major Requirements:

- AST 1106, Automotive Engine Repair .................................................................... 6
- AST 1206, Automotive Electrical/Electronic Systems .............................................. 6
- MTH 1203, Technical Mathematics (or related lab) ................................................ 3
- AST 1306, Automotive Suspension and Steering .................................................... 6
- AST 1428, Automotive Engine Performance ......................................................... 8
- AST 1504, Automotive Brake System ..................................................................... 4
- AST 2119, Automatic Transmission/Transaxles ...................................................... 9
- AST 2209, Automotive Manual Drive Train and Axles ......................................... 9
- COM 1303, Technical Communications ................................................................ 6
- AST 1806, Automotive Heating and Air Conditioning ........................................... 6

Electives:

- BUS 1303, Computer Applications for Business .................................................. 3
- AST 1101, Automotive Service Lab ....................................................................... 1
- AST 1202, Automotive Service Lab ....................................................................... 2

Total 65*

*Hours include extensive hands-on laboratory work

Associate in Applied Science

Major in Business Technology

General Education Requirements:

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1003, Composition I ........................................................................................ 3</td>
</tr>
<tr>
<td>See the ASU web page (<a href="http://www.astate.edu">www.astate.edu</a>) for current bulletin information.</td>
</tr>
</tbody>
</table>
### Associate in Applied Science
#### Major in Digital Electronic Technology

**General Education Requirements:**
- ENG 1003, Composition I ................................................................................. 3
- ENG 1013, Composition II ............................................................................. 3
- Natural Science Elective with Lab ................................................................. 4
- SOC 2213, Principles of Sociology OR PSY 2013, Introduction to Psychology ....................................................................................... 3
- HIST 2763, United States History Since 1876 OR HIST 2773, United States History Since 1876 .......................................................... 3
- MATH 1023, College Algebra ......................................................................... 3
- BUS Elective .................................................................................................. 3

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT 1105, AC Circuits .......................................................................... 5</td>
<td></td>
</tr>
<tr>
<td>MTH 1203, Technical Mathematics ..................................................... 3</td>
<td></td>
</tr>
<tr>
<td>ELT 1705, Analog Devices ....................................................................... 5</td>
<td></td>
</tr>
<tr>
<td>ELT 1805, Network Essentials .................................................................. 5</td>
<td></td>
</tr>
<tr>
<td>ELT 1905, Cabling Techniques/Methods/Standards ................................ 5</td>
<td></td>
</tr>
<tr>
<td>ELT 1605, Digital Logic .......................................................................... 5</td>
<td></td>
</tr>
<tr>
<td>COM 1203, Technical Communications ............................................... 3</td>
<td></td>
</tr>
<tr>
<td>ELT 1652, Programming .......................................................................... 2</td>
<td></td>
</tr>
<tr>
<td>ELT 1754, CISCO Router Configurations ............................................... 4</td>
<td></td>
</tr>
<tr>
<td>ELT 2605, LAN Technologies .................................................................. 5</td>
<td></td>
</tr>
<tr>
<td>ELT 2306, Microcomputer Troubleshooting .......................................... 5</td>
<td></td>
</tr>
<tr>
<td>ELT 2705, Signal Processing .................................................................. 5</td>
<td></td>
</tr>
<tr>
<td>ELT 2805, WAN Technologies .................................................................. 5</td>
<td></td>
</tr>
<tr>
<td>ELT 2415, Fiber Optics .......................................................................... 5</td>
<td></td>
</tr>
<tr>
<td>ELT 2405, Instrument Repair and Calibration ...................................... 5</td>
<td></td>
</tr>
<tr>
<td>ELT 2703, Transducer Circuits .............................................................. 3</td>
<td></td>
</tr>
</tbody>
</table>

Total 102

---

### Associate in Applied Science
#### Major in Paramedics

**General Education Requirements:**
- ENG 1003, Freshman English I .................................................................... 3
- ENG 1013, Freshman English II .................................................................... 3
- Natural Science Elective with Lab ............................................................... 4
- SOC 2213, Principles of Sociology OR PSY 2013, Introduction to Psychology ....................................................................................... 3
- HIST 2763, United States History Since 1876 OR HIST 2773, United States History Since 1876 .......................................................... 3
- MATH 1023, College Algebra ......................................................................... 3
- BUS Elective .................................................................................................. 3

**Major Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHS 1103, Anatomy and Physiology ................................................... 3</td>
<td></td>
</tr>
<tr>
<td>EHS 1201, Pre-Hospital .......................................................................... 1</td>
<td></td>
</tr>
<tr>
<td>EHS 1302, Pharmacology ......................................................................... 2</td>
<td></td>
</tr>
<tr>
<td>EHS 1304, Preparatory .......................................................................... 4</td>
<td></td>
</tr>
<tr>
<td>EHS 1402, Operations Management ..................................................... 2</td>
<td></td>
</tr>
<tr>
<td>EHS 1501, Field I ..................................................................................... 1</td>
<td></td>
</tr>
<tr>
<td>EHS 1601, Clinical I ............................................................................... 1</td>
<td></td>
</tr>
<tr>
<td>EHS 1904, Trauma Management ............................................................ 4</td>
<td></td>
</tr>
<tr>
<td>EHS 1903, Medical Emergencies I ......................................................... 3</td>
<td></td>
</tr>
<tr>
<td>EHS 1904, Cardiac Emergencies ............................................................. 4</td>
<td></td>
</tr>
</tbody>
</table>

Total 27

---

See the ASU web page (www.astate.edu) for current bulletin information.
COMPUTER APPLICATIONS (CA)

2003. Introduction to Computing/BASIC
A brief survey of electronic computers, their components and functions, number representation, and machine arithmetic. Study of the BASIC programming language, instructions, data types, arithmetic expressions, sequencing, arrays. Emphasis upon programming projects utilizing good programming style, problem solving, flowcharting, algorithm development and simple I/O.

3023. FORTRAN Programming Applications I
A study of the FORTRAN programming language, including I/O, arithmetic operations, string processing, internal search and sorting, debugging and testing. Emphasis upon the use of FORTRAN for scientific applications. Prerequisite: CA 2003.

3033. Principles of Computer Electronics
A study of the basic operation of digital electronic devices, including many devices, logic, gates, etc. Designed to give the elementary student an appreciation of the functions of digital computers. Prerequisite: MATH 1033 and CA 2003.

3043. COBOL Programming Applications I
A study of the COBOL programming language, including I/O, arithmetic operations, assorted techniques for processing data lists. Emphasis upon good programming style for business applications. Prerequisite: CA 2003.

3063. RPG Programming Applications I
A study of the RPG programming language with emphasis on its application to a wide variety of routine business problems. Prerequisite: CA 2003.

4013. Seminar in Computer Applications
Current topics in computing. Emphasis of course will vary depending upon student needs and recent development in computers. Course will be offered on demand. Prerequisite: permission of instructor and department chair. (May be repeated when topic changes)

4023. Computer Systems Analysis and Design
Principles of systems analysis for the design of computer applications. The study of approaches to development of computer based information systems; information systems planning for the organization, setting objectives and priorities; systems development procedures, project organization. Students will conduct a systems study for a particular case. Prerequisite: CA 3023 or CA 3043.

4033. Data Base Systems Applications
Current practices of data base management systems. Includes considerations of data models, data descriptions, file organizations, file security, and data integrity and reliability. Prerequisite: CA 3023 or CA 3043.

4053. COBOL Programming Applications II
Advanced study of the COBOL programming language, with emphasis on practical business problems, structured programming techniques, computing efficiency, data structures, subroutines, file design and processing, job control, and program documentation. Prerequisite: CA 3043.

See the ASU web page (www.astate.edu) for current bulletin information.
The Faculty (as of October 30, 2004)

ROGER W. ABERNATHY, 1985  
Associate Professor of Mathematics  
B.S., Southeast Missouri State University  
M.S., Arkansas State University  
Ph.D., Clemson University

HARRIETTE ADAMS, 1996  
Instructor in Physical Education  
B.S.E., Arkansas State University  
M.S., Arkansas State University

THOMAS MYERS ADAMS, II, 1981  
Professor of Physical Education  
B.S., East Carolina University  
M.A., East Carolina University  
Ed.D., West Virginia University

DAVID AGNEW, 1990  
Associate Professor of Agricultural Education  
B.S.A.E., University of Tennessee—Martin  
M.Ed., Mississippi State University  
Ed.D., Mississippi State University

LARRY AIKMAN, JR., LTC, 2004  
Professor of Military Science  
B.S., Henderson State University  
M.S., Kansas State University

CINDY ALBRIGHT, 1976  
Associate Professor of Physical Education  
B.S., Northwestern State University  
M.Ed., Northwestern State University  
Ph.D., Texas Woman's University

ROY ALDRIDGE, 2000  
Assistant Professor of Physical Therapy  
B.S., University of Tennessee—Memphis

EDWARD ALEXANDER, 1994  
Assistant Professor of Music  
—Director of Bands  
B.M.E., State College of Arkansas  
M.M.E., Arkansas State University

SUSAN DAVIS ALLEN, 2002  
Professor of Chemistry, Physics, and Engineering  
—Vice Chancellor for Research and Academic Affairs  
B.S., Colorado College  
Ph.D., University of Southern California

WILLIAM J. ALLEN, 1979  
Professor of Art History  
—Director of Center for Learning Technology and LearnOnLine  
B.A., University of Alabama  
M.A., The Johns Hopkins University  
Ph.D., The Johns Hopkins University

STACY ALLEY, 2003  
Assistant Professor of Theatre-Voice and Movement  
B.A., University of Southern California—Los Angeles  
M.F.A., University of Alabama—Tuscaloosa

OSABUOHEN P. AMIENYI, 1989  
Professor of Radio-Television  
B.S., Tennessee State University  
M.A., Northern Illinois University  
Ph.D., Bowling Green State University

ROBIN L. ANDERSON, 1976  
Professor of History  
A.B., University of California—Berkeley  
M.A., University of California—Berkeley  
Ph.D., University of California—Davis

TAMMY ANGEL-SULLIVAN, 2002  
Temporary Instructor in English  
B.A., Arkansas State University  
M.A., Arkansas State University

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
JASON CAUSEY, 2003
B.S., Arkansas State University
M.S., Arkansas State University
Temporary Instructor in Computer Science

ERIC M. CAVE, 1995
B.A., Trinity University
M.A., University of California—Irvine
Ph.D., University of California—Irvine
Associate Professor of Philosophy

THOMAS H. CHAFFEE, 1968
B.A., Dominican College
M.F.A., University of Wisconsin
Professor of Art

DEBORAH K. CHAPPEL, 1991
B.S.E., Arkansas State University
M.A., Duke University
Ph.D., Duke University
Associate Professor of English

NOLA CHRISTENBERRY, 1988
B.S.E., Arkansas State University
M.S.E., Arkansas State University
Ph.D., Memphis State University
Associate Professor of Psychology and Counseling —Coordinator, Graduate Counseling Programs

LESLEI CHRISTENSEN, 1998
B.F.A., University of Iowa
M.A., Arkansas State University
Instructor in Art —Director, Bradbury Gallery

ALAN CHRISTIAN, 2002
B.S., University of Wisconsin
M.S., Arkansas State University
Ph.D., Miami University
Assistant Professor of Aquatic Biology

DORIS CHU, 2003
B.A., Central Police University—Taiwan
M.Ed., Oklahoma State University
M.A., State University of New York—Albany
Ph.D., State University of New York—Albany
Assistant Professor of Criminology

BRIAN CHURCH, 2003
B.S., Murray State University
M.A., Murray State University
Ph.D., University of Alabama
Assistant Professor of Physical Education

LAUREN SACK CLARK, 2003
B.M., University of Hartford
M.A., Longy School of Music
M.M., Northwestern University
D.M.A., Boston University
Assistant Professor of Music

LINDA DAVIS CLARK, 1970
B.A., Central Methodist College
M.A., Memphis State University
Assistant Professor of Speech Communication

KEITH CLEMENT, 2001
B.A., San Diego State University
M.A., San Diego State University
Ph.D., University of Tennessee—Knoxville
Temporary Assistant Professor of Criminology

WILLIAM M. CLEEMTS, 1971
B.A., University of Texas—Austin
M.A., Indiana University
Ph.D., Indiana University
Professor of English and Folklore —Editor, The Arkansas Review

RICKY C. CLIFFT, 1980
B.S., University of Arkansas—Fayetteville
M.S., University of Arkansas—Fayetteville
Ph.D., University of Houston
Professor of Civil & Environmental Engineering —Interim Dean, College of Engineering

DANIEL CLINE, 1992
B.A., University of Nevada
M.A., University of Michigan
Ed.D., Indiana University
Professor of Education

GLORIA COBBS, 2002
B.A., Arkansas Mechanical and Normal College
M.S.W., University of Arkansas—Little Rock
Temporary Instructor in Teacher Education (ASU-Beebe)

KENDRA COGGIN, 2003
B.F.A., Mississippi State University
M.F.A., University of Memphis
Assistant Professor of Art-Graphic Design

CHARLES RONALD COLEMAN, 1991
B.S.E., University of Arkansas
M.S., Arkansas State University
S.C.C.T., Arkansas State University
Doctor of Ministry, Evangel Christian University of America
Instructor in Mechanical Engineering —Director of Technology Program

ALESIA K. COLLINS, 1998
B.S., University of Tennessee—Memphis
M.P.A., University of Arkansas at Little Rock
Assistant Professor of Physical Therapy

JANELLE COLLINS, 1997
B.A., San Diego State University
M.A., San Diego State University
Ph.D., Washington State University
Associate Professor of English

CRAIG COLLISON, 1998
B.A., Washington State University
M.A., North Texas State University
Associate Professor of Music

JASON COMBS, 2001
B.S., Northwest Missouri State University
M.S., Southwest Missouri State University
Ph.D., University of Nebraska—Lincoln
Assistant Professor of Geography

MATTHEW COMEAU, 1999
B.S.E., University of Kansas
M.S.E., University of Kansas
Ph.D., University of Kansas
Associate Professor of Physical Education

LYNITA M. COOKSEY, 1993
B.S., Memphis State University
M.S., Arkansas State University
Ph.D., Oklahoma State University
Associate Professor of Environmental Entomology —Associate Vice Chancellor for Academic Affairs

GLENDA COPPEDEGE, 1995
B.A., Brenau College
M.A., Arkansas State University
Temporary Instructor in English

DAVID COX, 1992
B.S., University of Florida
M.Ed., University of Florida
Ph.D., University of Illinois
Professor of Education —Coordinator, Community College Teaching Program

CAROL CRAMER, 2004
B.A., University of California—Berkeley
M.A., University of California—Irvine
Ph.D., University of California—Irvine
Professor of Biological Sciences and Plant Pathology —Executive Director of ASU-Arkansas Biosciences Institute

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Institution</th>
<th>Degree(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMMY R. GENNUSO, 1963</td>
<td>Assistant Professor of English</td>
<td>B.A., Louisiana State University</td>
<td>M.A., Louisiana State University</td>
</tr>
<tr>
<td>CHARLES W. FORD, 1969</td>
<td>Professor of Marketing</td>
<td>B.A., Mississippi State University</td>
<td>M.B.A., Memphis State University D.B.A., Mississippi State University</td>
</tr>
<tr>
<td>JAMES FOREMAN, 2004</td>
<td>Reference Librarian</td>
<td>B.A., University of North Texas</td>
<td>M.S., University of North Texas</td>
</tr>
<tr>
<td>MARK FOSTER, 2001</td>
<td>Instructor in Finance</td>
<td>B.S., University of North Alabama</td>
<td>M.A., University of Alabama</td>
</tr>
<tr>
<td>GILBERT LEN FOWLER JR., 1978</td>
<td>Professor of Journalism</td>
<td>B.S., Arkansas State University</td>
<td>M.A., University of Mississippi Ph.D., Southern Illinois University—Carbondale</td>
</tr>
<tr>
<td>RUSSELL FOX, 2002</td>
<td>Temporary Assistant Professor of Political Science</td>
<td>B.A., Brigham Young University</td>
<td>M.A., BYU David M. Kennedy Center Ph.D., Catholic University of America</td>
</tr>
<tr>
<td>ROBERT FRANKLIN, 1997</td>
<td>Instructor in Radio-TV</td>
<td>B.S., Jackson State University</td>
<td>M.A., Jackson State University</td>
</tr>
<tr>
<td>RICHARD FREER, 1994</td>
<td>Associate Professor of Social Work</td>
<td>B.A., Anderson University B.S., Michigan State University</td>
<td>M.S.W., Michigan State University Ph.D., Case Western Reserve University</td>
</tr>
<tr>
<td>LEN FREY, 2000</td>
<td>Associate Professor of Management</td>
<td>B.S., Arkansas State University</td>
<td>M.B.A., Arkansas State University Ph.D., University of Memphis</td>
</tr>
<tr>
<td>KAREN FULLER, 2003</td>
<td>Temporary Instructor in Social Work</td>
<td>B.S., Arkansas State University</td>
<td>M.A., Arkansas State University M.S.W., University of Arkansas at Little Rock</td>
</tr>
<tr>
<td>DONALD FULLER, MAJ, 1999</td>
<td>Assistant Professor of Military Science</td>
<td>B.S., Regents College, State University of New York</td>
<td>Ph.D., University of Connecticut</td>
</tr>
<tr>
<td>WILBERT GAINES, 1972</td>
<td>Temporary Associate Professor of Physical Education</td>
<td>B.A., Philander Smith College B.S., Arkansas State University</td>
<td>M.S.E., Arkansas State University Ed.D., Ball State University</td>
</tr>
<tr>
<td>JOEL T. GAMBILL, 1973</td>
<td>Associate Professor of Journalism</td>
<td>B.S., Arkansas State University</td>
<td>M.A., University of Oklahoma Ph.D., Southern Illinois University—Carbondale</td>
</tr>
<tr>
<td>J. DEON GARRETT, 2003</td>
<td>Temporary Instructor in Computer Science</td>
<td>B.S., Arkansas State University</td>
<td>M.S., Arkansas State University</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
<table>
<thead>
<tr>
<th>Full Name</th>
<th>Position and School(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEBORAH GOODWIN, 2003</td>
<td>Temporary Assistant Professor of Teacher Education</td>
</tr>
<tr>
<td></td>
<td>B.S., Central Baptist College</td>
</tr>
<tr>
<td></td>
<td>M.A., Arkansas State University</td>
</tr>
<tr>
<td>KRISTIE GRAHAM, 2004</td>
<td>Temporary Instructor in Physical Therapy</td>
</tr>
<tr>
<td></td>
<td>B.S., Arkansas State University</td>
</tr>
<tr>
<td>GEORGE GRANT, 2003</td>
<td>Dean, Library and Information Resources</td>
</tr>
<tr>
<td></td>
<td>B.S., Morehouse College</td>
</tr>
<tr>
<td></td>
<td>M.S.L.S., Atlanta University</td>
</tr>
<tr>
<td></td>
<td>Ph.D., University of Pittsburgh</td>
</tr>
<tr>
<td>MARLA GRAVES, 1999</td>
<td>Assistant Professor of Health</td>
</tr>
<tr>
<td></td>
<td>B.S., Arkansas State University</td>
</tr>
<tr>
<td></td>
<td>M.S., Arkansas State University</td>
</tr>
<tr>
<td></td>
<td>Ph.D., University of Mississippi</td>
</tr>
<tr>
<td>POLLY GREEN, 1998</td>
<td>Instructor in Developmental Studies</td>
</tr>
<tr>
<td></td>
<td>B.S.E., Arkansas State University</td>
</tr>
<tr>
<td>WILLIAM JAMES GREENWALD, 1972</td>
<td>Associate Professor of History</td>
</tr>
<tr>
<td></td>
<td>B.A., North Texas State University</td>
</tr>
<tr>
<td></td>
<td>Ph.D., University of North Carolina—Chapel Hill</td>
</tr>
<tr>
<td>BERT GREENWALT, 1985</td>
<td>Professor of Agricultural Economics</td>
</tr>
<tr>
<td></td>
<td>B.S.A., Arkansas State University</td>
</tr>
<tr>
<td></td>
<td>M.S., University of Arkansas—Fayetteville</td>
</tr>
<tr>
<td></td>
<td>Ph.D., Mississippi State University</td>
</tr>
<tr>
<td>HEIDI GRIFFIN, 2004</td>
<td>Temporary Instructor In Mathematics</td>
</tr>
<tr>
<td></td>
<td>B.S., Arkansas State University</td>
</tr>
<tr>
<td></td>
<td>M.S., Arkansas State University</td>
</tr>
<tr>
<td>ANNE A. GRIPPO, 1995</td>
<td>Associate Professor of Biology</td>
</tr>
<tr>
<td></td>
<td>B.S., Fairleigh Dickinson University</td>
</tr>
<tr>
<td></td>
<td>Ph.D., University of North Carolina</td>
</tr>
<tr>
<td>RICHARD S. GRIPPO, 1995</td>
<td>Associate Professor of Environmental Biology</td>
</tr>
<tr>
<td></td>
<td>B.S., Fairleigh Dickinson University</td>
</tr>
<tr>
<td></td>
<td>M.S., Fairleigh Dickinson University</td>
</tr>
<tr>
<td></td>
<td>Ph.D., Pennsylvania State University</td>
</tr>
<tr>
<td>JOANNA M. GRYMES, 1989</td>
<td>Associate Professor of Early Childhood Education</td>
</tr>
<tr>
<td></td>
<td>B.S., Virginia Polytechnic Institute and State University</td>
</tr>
<tr>
<td></td>
<td>M.S., University of Delaware</td>
</tr>
<tr>
<td></td>
<td>Ph.D., Virginia Polytechnic Institute and State University</td>
</tr>
<tr>
<td>GAURI-SHANKAR GUHA, 2001</td>
<td>Assistant Professor of Economics</td>
</tr>
<tr>
<td></td>
<td>M.S., Birla Institute of Technology &amp; Science</td>
</tr>
<tr>
<td></td>
<td>M.B.A., Indian Institute of Foreign Trade</td>
</tr>
<tr>
<td></td>
<td>Ph.D., Pennsylvania State University</td>
</tr>
<tr>
<td>DAVINA GUSKOV, 2003</td>
<td>Temporary Instructor in Journalism</td>
</tr>
<tr>
<td></td>
<td>B.A., University College Cork—Ireland</td>
</tr>
<tr>
<td></td>
<td>M.S., Arkansas State University</td>
</tr>
<tr>
<td>JULIET HAHN, 2003</td>
<td>Assistant Professor of Chemistry</td>
</tr>
<tr>
<td></td>
<td>B.S., University of South Carolina</td>
</tr>
<tr>
<td></td>
<td>Ph.D., State University of New York</td>
</tr>
<tr>
<td>CATHY PATTON HALL, 1991</td>
<td>Assistant Professor of Nursing — Co-Director, ASN Program</td>
</tr>
<tr>
<td></td>
<td>B.S., Arkansas State University</td>
</tr>
<tr>
<td></td>
<td>M.S., University of Cincinnati</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
ROBERT E. JOHNSON, 1967
Associate Professor of Mathematics
B.S., Arkansas Tech University
M.S.C.S., University of Mississippi
Ph.D., University of Mississippi

RONALD L. JOHNSON, 1992
Professor of Zoology
B.S., California State University
M.A., University of Northern Colorado
D.A., University of Northern Colorado

WARREN JOHNSON, 1998
Associate Professor of Languages
B.A., University of Iowa
A.M., University of Michigan
Ph.D., University of Michigan

CHARLES M. JOINER, 1987
Associate Professor of Social Work
B.A., Harding University
M.S.W., University of Tennessee
Ph.D., Washington University in St. Louis

CHERISSE JONES, 2003
Assistant Professor of History
B.A., College of Charleston
M.A., College of Charleston
Ph.D., Ohio State University

CRAIG H. JONES, 1977
Professor of Psychology and Counseling
B.A., Rutgers University
M.A., University of Kansas
Ed.D., University of Mississippi

DONNA JONES, 2000
Temporary Instructor in Teacher Education
B.S., University of Central Arkansas
M.S., Arkansas State University
Ph.D., University of Texas—Arlington

JULIE JUER ISAACSON, 1987
Assistant Professor of Nursing
B.S.N., University of Tennessee
M.S.N., Vanderbilt University

AMY KALLAM, 2001
Assistant Professor of Psychology and Counseling
B.A., Hendrix College
M.S., University of Central Arkansas
Ph.D., University of Georgia

JOHN H. KEECH, 1968
Professor of Art
B.F.A., Washington University
M.F.A., University of Iowa

BECKY KEELE, 2004
Associate Professor of Nursing
B.S.N., University of Central Arkansas
M.S., University of Kansas
Ph.D., University of Kansas
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRYSTAL McDANIEL, 2003</td>
<td>Temporary Instructor in Physical Education</td>
<td>B.S.E., Arkansas State University M.S.E., Arkansas State University</td>
</tr>
<tr>
<td>MICHAEL McDANIEL, 1989</td>
<td>Professor of Communication Disorders</td>
<td>B.S.E., Arkansas State University M.A., Memphis State University</td>
</tr>
<tr>
<td>RICK McDANIEL, 1972</td>
<td>Professor of Zoology</td>
<td>B.S., Texas A&amp;M University M.S., Texas Tech University</td>
</tr>
<tr>
<td>MARY McDUGAL, 2001</td>
<td>Temporary Assistant Professor of Nursing</td>
<td>B.S.N., University of Arkansas Medical Sciences M.S.N., Arkansas State University</td>
</tr>
<tr>
<td>MARK McJUNKIN, 1989</td>
<td>Assistant Professor of Teacher Education</td>
<td>B.S., Northeastern Oklahoma State University M.Ed., Northeastern Oklahoma State University</td>
</tr>
<tr>
<td>TANYA McKay, 2004</td>
<td>Assistant Professor of Entomology</td>
<td>B.S., Arcadia University - Nova Scotia M.S., University of Manitoba Ph.D., Kansas State University</td>
</tr>
<tr>
<td>WILLIAM McLEAN, 2002</td>
<td>Assistant Professor of Public Administration</td>
<td>B.A., Arkansas State University M.A., Arkansas State University Ph.D., University of New Orleans</td>
</tr>
<tr>
<td>ARTHUR McLIN, 2002</td>
<td>Assistant Professor of Teacher Education</td>
<td>B.A., University of New Orleans M.A., University of New Orleans S.C.O.T., Arkansas State University Ed.S., Arkansas State University Ed.D., Arkansas State University</td>
</tr>
<tr>
<td>ZELDA McMURTRY, 2002</td>
<td>Temporary Instructor in Teacher Education</td>
<td>B.A., Harding University —ASU - Beebe Degree Center</td>
</tr>
<tr>
<td>GREGORY MEEKS, 2003</td>
<td>Assistant Professor of Teacher Education</td>
<td>B.S.E., Quachita Baptist University M.S.E., Henderson State University Ph.D., University of North Texas</td>
</tr>
<tr>
<td>SUZANNE COLLIER MELESCUE, 1997</td>
<td>Associate Professor of Mathematics</td>
<td>B.S., University of Tennessee—Chattanooga M.S., University of Tennessee—Knoxville Ph.D., University of Tennessee—Knoxville</td>
</tr>
<tr>
<td>DON MERRELL, 2001</td>
<td>Temporary Assistant Professor of Philosophy</td>
<td>B.A., Arkansas State University M.A., University of Mississippi</td>
</tr>
<tr>
<td>JIE MIAO, 1998</td>
<td>Associate Professor of Mathematics</td>
<td>B.S., Hangzhou University-PR China M.S., Hangzhou University-PR China Ph.D., Michigan State University</td>
</tr>
<tr>
<td>ELISSA MILLER, 1994</td>
<td>Assistant Professor of Nursing</td>
<td>B.A., Harding University M.N.Sc., University of Arkansas for Medical Sciences M.A., Memphis State University Ph.D., Memphis State University</td>
</tr>
<tr>
<td>RENEE MILLER, 2001</td>
<td>Temporary Assistant Professor of Nursing</td>
<td>B.S.N., Arkansas State University M.S.N., Arkansas State University</td>
</tr>
<tr>
<td>ROBERT DALE MILLER, 1997</td>
<td>Associate Professor of Music</td>
<td>B.M.E., East Texas State University M.M.E., East Texas State University Ph.D., Texas Tech University—Lubbock</td>
</tr>
<tr>
<td>ROD MILLER, 1998</td>
<td>Librarian—Head of Government Information Resources</td>
<td>B.A., Henderson State University M.L.S., Louisiana State University</td>
</tr>
<tr>
<td>CLYDE A. MILNER II, 2002</td>
<td>Professor of History</td>
<td>A.B., University of North Carolina—Chapel Hill M.A., Yale University M.Phi., Yale University Ph.D., Yale University</td>
</tr>
<tr>
<td>SUZANNE COLLIER MELESCUE, 1997</td>
<td>Associate Professor of Mathematics</td>
<td>B.A., University of Wisconsin—LaCrosse M.A., Southern Illinois University—Edwardsville</td>
</tr>
<tr>
<td>KURT MONROE, 2003</td>
<td>Temporary Instructor in Sociology</td>
<td>B.S., University of Wisconsin—LaCrosse M.A., Southern Illinois University—Edwardsville</td>
</tr>
<tr>
<td>ANDY MOONEYHAN, 1999</td>
<td>Temporary Instructor in Physical Education</td>
<td>B.S.E., Arkansas State University M.S., Arkansas State University</td>
</tr>
</tbody>
</table>

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
KIMBERLY VICKREY, 1999
B.F.A., Delta State University
M.F.A., University of Memphis

SERGIO RUMINOTT VILLALOBOS, 2003
Licenciatura, Universidad Arico—Chile
Certificate, Universidad Arico—Chile
M.A., University of Pittsburgh
Ph.D., University of Pittsburgh

DEBRA J. WALDEN, 1988
B.A., Southwestern at Memphis
B.S.N., University of Arkansas—Little Rock
M.N.Sc., University of Arkansas for Medical Sciences

LEAH WALKER, 2001
B.S., Arkansas State University
M.S., Arkansas State University

PATRICIA WALLS, 2001
B.A., Arkansas State University
M.S.W., University of Arkansas—Little Rock
Ph.D., Jackson State University

RICHARD PIERCE WANG, 1988
B.A., State University of New York—Fredonia
M.A., Wayne State University
Ph.D., Wayne State University

JIM WASHAM, 1991
B.S., Arkansas State University
M.B.A., Arkansas State University
Ph.D., University of Mississippi

NATASHA WASHINGTON, 2002
B.A., Quachita Baptist University
M.A., Arkansas State University
S.C.C.T., Arkansas State University

JULIE WATSON, 2003
B.S., Middle Tennessee State University
M.S., Arkansas State University

LARRY WEAVER, 2004
B.S., University of Kansas
M.S., Indiana University
M.A., Indiana University
Ph.D., Indiana University

KELLY WEEKS, 2001
B.A., Rhodes College
M.S., University of Memphis

THOMAS WHEELER, 1998
B.S., University of Houston
Ph.D., University of Texas

DENNIS W. WHITE, 1974
B.S.E., University of Arkansas—Fayetteville
M.A., University of Arkansas—Fayetteville
Ph.D., Southern Illinois University—Carbondale

KATHY WHITE, 2004
B.S.N., Southeast Missouri State University
M.S.N., University of Southern Alabama

KORTNEY WHITE, 2003
B.S., Arkansas State University
M.B.A., Arkansas State University

TRACY WHITE, 1999
B.S., University of Central Arkansas

J. DARRELL WIDICK, 1984
B.S.A., University of Tennessee
M.S., University of Arkansas—Fayetteville
Ph.D., University of Arkansas—Fayetteville

CHRIS WIENKE, 2001
B.A., Southern Illinois University
M.A., University of New Orleans
Ph.D., University of Pittsburgh

WYNONA WIGGINS, 1993
B.S.N., Arkansas State University
M.S.N., University of Tennessee—Memphis

BARBARA WIKE, 1999
B.S.N., University of Arkansas—Monticello
(CVN at ASU-Mountain Home)
M.S.N., University of Central Arkansas

JOHN WILLCUTTS, 2003
B.S., University of Florida
M.E., University of Florida

CARMEN WILLIAMS, 2003
B.S.E., Arkansas State University
M.A., Arkansas State University

DIANA WILLIAMS, 1999
B.A., South Methodist University
M.A., University of North Texas—Denton
Ed.D., University of Nevada—Las Vegas

GAYLE WILLIAMS, 1991
B.A., University of Texas—Denton
Ph.D., University of North Texas—Mabank

RICHARD PIERCE WANG, 1988
B.A., State University of New York—Fredonia
M.A., Wayne State University
Ph.D., Wayne State University

THOMAS WHEELER, 1998
B.S., University of Houston
Ph.D., University of Texas

DIANA WILLIAMS, 1999
B.A., South Methodist University
M.A., University of North Texas—Denton
Ed.D., University of Nevada—Las Vegas

GAYLE WILLIAMS, 1991
B.A., University of Texas—Denton
Ph.D., University of North Texas—Mabank

THOMAS WILLIAMS, 2000
B.A., Ashland College
Ph.D., University of Houston

See the ASU web page (www.astate.edu) for current bulletin information.
PAIGE WIMBERLEY, 1997
B.S.N., Arkansas State University
M.S.N., Arkansas State University

ASSISTANT PROFESSOR OF NURSING

RAYMOND WINTERS, 1995
B.A., Harding University
B.S., Midwestern State University
M.S., Amber University

ASSOCIATE PROFESSOR OF RADIOLIC Sciences
—Director, Radiologic Sciences Program

LINDA WOMACK, 2001
B.S.E., Arkansas State University
M.S.E., Arkansas State University

TEMPORARY INSTRUCTOR IN MATHEMATICS

CARLOS WOOD, 2001
B.S., Arkansas State University

TEMPORARY INSTRUCTOR IN ENGINEERING

STANLEY WOOLDRIDGE, 2000
B.S.E., Arkansas State University
M.S., Arkansas State University

TEMPORARY INSTRUCTOR IN MATHEMATICS

MERYL WORLEY, 2002
B.S.E.E., Longwood College
M.Ed., University of Virginia

COORDINATOR OF DELTA STUDIES ACTIVITIES

PEGGY WRIGHT, 1998
B.A., Arkansas State University
M.P.A., Arkansas State University

J. LESLIE WYATT, 1995
B.A., Abilene Christian University
B.F.A., University of Texas—Austin
M.F.A., University of Texas—Austin
Ph.D., University of Texas—Austin

PROFESSOR OF HIGHER EDUCATION AND ART
—President of the University

WILLIAM VINCENT WYATT, 1967
B.S., Arkansas State University
M.S., University of Arkansas-Fayetteville
Ph.D., University of Arkansas-Fayetteville

PROFESSOR OF CHEMISTRY

KAREN L. YANOWITZ, 1996
B.A.S., Brandeis University
M.S., University of Massachusetts
Ph.D., University of Massachusetts

ASSOCIATE PROFESSOR OF PSYCHOLOGY
—Interim Chair, Department of Psychology and Counseling

MARILYN YERGLER, 1998
B.S.N., University of Arkansas—Fayetteville

TEMPORARY ASSISTANT PROFESSOR OF NURSING

CHARLOTTE YOUNG, 1994
B.S.N., University of South Carolina
M.S.N., Catholic University
M.S., The Citadel
Ph.D., Syracuse University

PROFESSOR OF NURSING

NANCY YOUNG, 1966
B.S.E., Arkansas State University
M.S.E., Arkansas State University

INSTRUCTOR IN ENGLISH

LILY ZENG, 2004
B.A., Hunan Normal University—China
M.A., Zhongshan University—China

INSTRUCTOR IN RADIO-TELEVISION

See the ASU web page (www.astate.edu) for current bulletin information.
Emeriti

Emeritus Professor of Counselor Education and Psychology
Emeritus Associate Professor of Art Education
Larry Ball, 1970-2001
Emeritus Professor of History
Eugene A. Ballard, 1964-1990
Emeritus Assistant Professor of Printing
Rosalie Barber, 1969-2000
Emeritus Instructor in Physical Education
Edmund L. Barnette, 1967-1993
Emeritus Professor of Counselor Education and Psychology
Baron Conaway, 1965-1995
Emeritus Professor of Reading
Emeritus Professor of Music and Dean of Fine Arts
John E. Cramer, 1978-1986
Emeritus Assistant Professor of Radio-Television
Albert B. Crosswait, 1968-1990
Emeritus Associate Professor of Education
Roberta Daniels, 1985-1999
Emeritus Professor of Gifted & Talented Education
James L. Davenport, 1954-1985
Emeritus Associate Professor of Agricultural Economics
Emma Sue Davidson, 1972-1988
Emeritus Assistant Professor of Education
Don Denny, 1958-1993
Emeritus Associate Dean of Students
Bonnie Deuter, 1981-2003
Emeritus Assistant Professor of Nursing
Emeritus Assistant Professor of Psychology
Beverly DeWater, 1958-1993
Emeritus Associate Professor of Sociology
Bonnie Deuter, 1981-2003
Emeritus Assistant Professor of Nursing
Emeritus Assistant Professor of Psychology
Beverly DeWater, 1958-1993
Emeritus Associate Professor of Sociology

Baron Conaway, 1965-1995
Emeritus Professor of Reading
Emeritus Professor of Music and Dean of Fine Arts
John E. Cramer, 1978-1986
Emeritus Assistant Professor of Radio-Television
Albert B. Crosswait, 1968-1990
Emeritus Associate Professor of Education
Roberta Daniels, 1985-1999
Emeritus Professor of Gifted & Talented Education
James L. Davenport, 1954-1985
Emeritus Associate Professor of Agricultural Economics
Emma Sue Davidson, 1972-1988
Emeritus Assistant Professor of Education
Don Denny, 1958-1993
Emeritus Associate Dean of Students
Bonnie Deuter, 1981-2003
Emeritus Assistant Professor of Nursing
Emeritus Assistant Professor of Psychology
Beverly DeWater, 1958-1993
Emeritus Associate Professor of Sociology

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
Lyle G. Rhea, 1983-1994  Emeritus Professor of Mechanical Engineering
Edward L. Richards, 1963-1994  Emeritus Professor of Botany
Donald Roberts, 1968-1999  Emeritus Professor of Decision Sciences
Ellen Robinson, 1965-1994  Emeritus Assistant Professor of English
Luis Rodriguez, 1980-1994  Emeritus Associate Professor of Business Law
Keith Rogers, 1986-2000  Emeritus Professor of Agricultural Economics and Dean of Agriculture
Robert Rossa, 1969-2004  Emeritus Professor of Mathematics & Computer Science
Timothy Ross, 1965-2000  Emeritus Professor of History
Amos B. Rougeau, 1957-1992  Emeritus Professor of Agricultural Education
Vance Sales, 1960-1991  Emeritus Professor of Education and Dean of Education
Robert O. Saunders, 1965-1976  Emeritus Associate Professor of Physical Science
Louis Semrau, 1977-2001  Emeritus Professor of Special Education
Pat Shackelford, 1976-1997  Emeritus Associate Professor of Agricultural Engineering
J.B. Sheofee, 1964-1987  Emeritus Assistant Professor of Mathematics
Dewey H. Siford, 1961-1997  Emeritus Professor of Chemistry
Frances Smallwood, 1964-1987  Emeritus Assistant Professor of Physical Education
C. Calvin Smith, 1970-2002  Emeritus Professor of History
Eugene Wilson Smith, 1958-1992  Emeritus President of the University and Professor of Education
Lois M. Snider, 1970-1990  Emeritus Instructor in Nursing
Jared Spears, 1967-1999  Emeritus Professor of Music
Helen S. Steger, 1981-1992  Emeritus Assistant Professor of Counselor Education
James H. Stevenson, 1965-1980  Emeritus Professor of Biology and Dean of Science
Shirl D. Strauser, 1966-1994  Emeritus Professor of Accounting
Peggy Stroud, 1954-1984  Emeritus Associate Dean of Students
Jack Sugg, 1968-1999  Emeritus Assistant Professor of Physical Education
Ann Swaty, 1975-2004  Emeritus Assistant Professor of Music
Joseph P. Sweat, 1964-1990  Emeritus Professor of Education and Chair of Educational Administration and Secondary Education
Lois Ann Swisher, 1969-1990  Emeritus Assistant Professor of Spanish
Lonnie Talbert, 1966-1998  Emeritus Professor of Economics
Fuad Talib, 1982-2001  Emeritus Associate Professor of Insurance
Richard L. Tangeman, 1970-2002  Emeritus Professor of Mathematics and Computer Science

Aubrey W. Tennille, 1962-1987  Emeritus Professor of Agronomy
John B. Thomas, 1984-1993  Emeritus Instructor in Journalism
Dan Timmermann, 1967-1993  Emeritus Professor of Botany
Stephen Tricarico, 1968-2001  Emeritus Assistant Professor of Geography
Normal Trautwein, 1967-2003  Emeritus Professor of Chemistry
Stanley Vanagunas, 1983-2000  Emeritus Professor of Public Administration
Mildred Vance, 1948-2002  Emeritus Professor of Education
Carl Vaupel, 1971-2002  Emeritus Professor of Education
David Vosburg, 1966-1996  Emeritus Associate Professor of Geology
Theron Wadde, 1980-2002  Emeritus Associate Professor of Music
W.F. Wei, 1966-1985  Emeritus Associate Professor of Physics
Jess R. White, 1968-1989  Emeritus Professor of Physical Education
Grace Whitits, 1985-1999  Emeritus Professor of Nursing
Robert Whitts, 1985-1999  Emeritus Professor of Accounting
Dalton Whitt, 1968-1997  Emeritus Assistant Professor of Accounting
Emelda Williams, 1978-2000  Emeritus Professor of Marketing and Chair of Management, Marketing & Business Systems
Herman F. Williams, 1953-1980  Emeritus Associate Professor of Agricultural Engineering
J. Larry Williams, 1974-1997  Emeritus Professor of Sociology
Stanley H. Williams, 1972-1997  Emeritus Professor of Education
William Williams, 1978-1996  Emeritus Associate Professor of Finance
Mary Lou Wood, 1965-1995  Emeritus Assistant Professor of Administrative Services
Donald E. Wright, 1970-1997  Emeritus Professor of Education
Charles Yauger, 1964-2000  Emeritus Associate Professor of Management

See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
See the ASU web page (www.astate.edu) for current bulletin information.
<table>
<thead>
<tr>
<th>Index</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Science, Leadership Development ........................................................................................................................................</td>
<td>Political Theory, Description of Courses .........................................................................................................................................</td>
</tr>
<tr>
<td>Minors Offered, Listing with pages ......................................................................................................................................................</td>
<td>President’s List .................................................................................................................................................................................</td>
</tr>
<tr>
<td>Mission of the University ........................................................................................................................................................................</td>
<td>Pre-professional Programs .................................................................................................................................................................</td>
</tr>
<tr>
<td>Museum ...............................................................................................................................................................................................................</td>
<td>Prerequisites for Courses .................................................................................................................................................................</td>
</tr>
<tr>
<td>Music, Basic Courses Descriptions ............................................................................................................................................................</td>
<td>Printing Management, Bachelor of Science Degree .........................................................................................................................</td>
</tr>
<tr>
<td>Music, Department of ...............................................................................................................................................................................</td>
<td>Printing, Description of Courses ......................................................................................................................................................</td>
</tr>
<tr>
<td>Music, Bachelor of Music Degree .................................................................................................................................................................</td>
<td>Privacy of Records, Academic ..............................................................................................................................................................</td>
</tr>
<tr>
<td>Emphasis Areas: Instrumental Performance, Voice Performance, Keyboard Performance and Composition ...................................................</td>
<td>Privately Endowed Scholarships .........................................................................................................................................................</td>
</tr>
<tr>
<td>Music, Bachelor of Arts Degree .................................................................................................................................................................</td>
<td>Professional Education Requirements, Secondary ..................................................................................................................................</td>
</tr>
<tr>
<td>Music Education, Description of Courses ................................................................................................................................................</td>
<td>Psychological and Counseling, Department of ..................................................................................................................................</td>
</tr>
<tr>
<td>Music Ensembles, Description of Courses ................................................................................................................................................</td>
<td>Psychology, Bachelor of Science Degree ..........................................................................................................................................</td>
</tr>
<tr>
<td>Music History and Literature, Description of Courses ..........................................................................................................................</td>
<td>Psychology, Description of Courses .....................................................................................................................................................</td>
</tr>
<tr>
<td>Music Performance, Description of Courses ..................................................................................................................................................</td>
<td>Public Administration, Description of Courses ..................................................................................................................................</td>
</tr>
<tr>
<td>Music Theory, Description of Courses ..........................................................................................................................................................</td>
<td>Public Relations, Description of Courses ........................................................................................................................................</td>
</tr>
<tr>
<td>Non-Degree Students, Admission of...............................................................................................................................................................</td>
<td>Publications of the University ..................................................................................................................................................................</td>
</tr>
<tr>
<td>Nursing and Health Professions Programs, Admission to ..........................................................................................................................</td>
<td>Quantitative Management, Description of Courses ............................................................................................................................</td>
</tr>
<tr>
<td>Nursing, Department of ..................................................................................................................................................................................</td>
<td>Radiation Therapy, Description of Courses ..........................................................................................................................................</td>
</tr>
<tr>
<td>Nursing, Bachelor of Science in Nursing Degree .........................................................................................................................................</td>
<td>Radiologic Sciences Program ........................................................................................................................................................................</td>
</tr>
<tr>
<td>Nursing, Associate in Applied Science in Nursing Degree .....................................................................................................................</td>
<td>Radiologic Sciences, Bachelor of Science in Radiologic Sciences Degree ..........................................................................................</td>
</tr>
<tr>
<td>Nursing, Description of Courses .................................................................................................................................................................</td>
<td>Emphasis Areas: Imaging Specialist, Radiation Therapy, Diagnostic Medical Sonography, Nuclear Medicine Technology</td>
</tr>
<tr>
<td>Nursing and Health Professions Programs, Probation, Retention, and Readmission ................................................................................</td>
<td>Radiologic Sciences, Description of Courses .........................................................................................................................................</td>
</tr>
<tr>
<td>Nursing and Health Professions, College of ..................................................................................................................................................</td>
<td>Radiologic Technology, Associate in Applied Science Degree ........................................................................................................</td>
</tr>
<tr>
<td>Nursing Practicum, Description of Courses (AASN) .........................................................................................................................................</td>
<td>Radiologic Technology Program ..................................................................................................................................................................</td>
</tr>
<tr>
<td>Nursing Practicum, Description of Courses (BSN) ........................................................................................................................................</td>
<td>Radio-Television, Department of ..........................................................................................................................................................</td>
</tr>
<tr>
<td>Nursing and Health Professions Programs Accreditation ........................................................................................................................</td>
<td>Radio-Television, Bachelor of Science Degree .................................................................................................................................</td>
</tr>
<tr>
<td>Off-Campus Courses ....................................................................................................................................................................................</td>
<td>Emphasis Areas: Broadcast News, Management-Sales-Programming, Production—Video/Audio Option, Production—New Media Option</td>
</tr>
<tr>
<td>Officers of the University 2004-2005 ...............................................................................................................................................................</td>
<td>Radio-Television, Description of Courses ...........................................................................................................................................</td>
</tr>
<tr>
<td>Officers of the Board 2004-2005 .........................................................................................................................................................................</td>
<td>Reading, Description of Courses ...............................................................................................................................................................</td>
</tr>
<tr>
<td>Organization of the University ........................................................................................................................................................................</td>
<td>Readmission Following Academic Suspension ........................................................................................................................................</td>
</tr>
<tr>
<td>Orientation, New Students ............................................................................................................................................................................</td>
<td>Readmission of Former Students ............................................................................................................................................................</td>
</tr>
<tr>
<td>Paramedics, Associate in Applied Science Degree ...................................................................................................................................</td>
<td>Readmission to Clinical Laboratory Sciences Program ................................................................................................................................</td>
</tr>
<tr>
<td>Philosophy, Bachelor of Arts Degree .............................................................................................................................................................</td>
<td>Readmission to Nursing Programs ..........................................................................................................................................................</td>
</tr>
<tr>
<td>Philosophy, Description of Courses .............................................................................................................................................................</td>
<td>Readmission to Physical Therapy Assistant Program ................................................................................................................................</td>
</tr>
<tr>
<td>Physical Education, Bachelor of Science in Education Degree ........................................................................................................</td>
<td>Readmission to Radiologic Sciences Program ...................................................................................................................................</td>
</tr>
<tr>
<td>Physical Education, Description of Courses ................................................................................................................................................</td>
<td>Refund of Fees Schedule ........................................................................................................................................................................</td>
</tr>
<tr>
<td>Physical Therapist Assistant, Associate in Applied Science Degree .....................................................................................................</td>
<td>Registration .................................................................................................................................................................................................</td>
</tr>
<tr>
<td>Physical Therapist Assistant Program ...........................................................................................................................................................</td>
<td>Religious Activities .......................................................................................................................................................................................</td>
</tr>
<tr>
<td>Physical Therapy Graduate Program, Description of Courses ..................................................................................................................</td>
<td>Requirements for Associate Degrees .........................................................................................................................................................</td>
</tr>
<tr>
<td>Physics, Bachelor of Science Degree ...............................................................................................................................................................</td>
<td>Requirements for Bachelors Degrees ......................................................................................................................................................</td>
</tr>
<tr>
<td>Physics, Description of Courses .....................................................................................................................................................................</td>
<td>Residence Hall Governance ............................................................................................................................................................................</td>
</tr>
<tr>
<td>Plant and Soil Science, Description of Courses ........................................................................................................................................</td>
<td>Residence Life .............................................................................................................................................................................................</td>
</tr>
<tr>
<td>Plant Science, Bachelor of Science in Agriculture Degree ....................................................................................................................</td>
<td>Residency Requirement, Degree Completion ..........................................................................................................................................</td>
</tr>
<tr>
<td>Police Department .........................................................................................................................................................................................</td>
<td>Residency Requirement, Fee Payment ....................................................................................................................................................</td>
</tr>
<tr>
<td>Policy Statement ..........................................................................................................................................................................................</td>
<td>Responsibility for Meeting Graduation Requirements ................................................................................................................................</td>
</tr>
<tr>
<td>Politics-General, Description of Courses .......................................................................................................................................................</td>
<td>Room and Board Per Semester ...............................................................................................................................................................</td>
</tr>
<tr>
<td>Political Methodology ...................................................................................................................................................................................</td>
<td>Room and Board—Summer Terms ...........................................................................................................................................................</td>
</tr>
<tr>
<td>Political Science, Bachelor of Arts Degree ................................................................................................................................................</td>
<td>435</td>
</tr>
</tbody>
</table>
Index

ROTC Program ................................................................. 367
Schedule Changes ........................................................... 38
Scholarship Sources ......................................................... 53
Second Baccalaureate Degree, Requirements for .......... 50
Secondary Education, Description of Courses ............ 191
Secondary Teaching Methods, Description of Courses 192
Seniors Taking Graduate Courses ................................. 73
Services for the Disabled ............................................... 1
Social Organizations ...................................................... 59
Social Science, Bachelor of Science in Education Degree 191
Social Work, Bachelor of Arts Degree ......................... 310
Social Work, Description of Courses ............................. 328
Sociology, Bachelor of Arts Degree ............................... 251
Sociology, Description of Courses ................................. 265
Sororities, List of ............................................................ 63
Spanish, Bachelor of Arts Degree ................................. 260
Spanish, Bachelor of Science in Education Degree ...... 261
Spanish, Description of Courses .................................... 278
Special Education, Description of Courses .................. 161
Special Interest Activities .............................................. 60
Special Programs .......................................................... 72
Special Studies Courses ............................................... 72
Speech Communication, Bachelor of Arts Degree .......... 150
Speech Communication, Description of Courses .......... 157
Speech Communication and Theatre Arts, Bachelor of Science in Education Degree 150
Speech Communication, Department of ..................... 149
Sport Management, Bachelor of Science Degree ......... 177
Statistics, Description of Courses ................................. 365
Student Activities Board .............................................. 57
Student Affairs Office .................................................. 51
Student Classification .................................................. 43
Student Conduct ......................................................... 55
Student Government Association ................................. 59
Student Health Center and Pharmacy ......................... 56
Student Life / Assessment Office ................................. 52
Student Responsibility ................................................ 37
Student Services ......................................................... 51
Studio Art, Description of Courses .............................. 232
Summer Sessions ....................................................... 72
Suspension .................................................................... 47
Table of Contents ....................................................... 6
Teacher Certification Graduation Requirement .......... 162
Teacher Education, Department of ......................... 164
Teacher Education Program, Admission and Retention 161
Teaching Internship, Description of Courses .............. 193
Technical Certificate Programs ................................... 72
Technical and Vocational Education, Associate in Science Degree ........................................... 102
Technical and Vocational Education, Description of Courses .................................................. 111
Technology, Associate in Science Degree .................... 204

See the ASU web page (www.astate.edu) for current bulletin information.